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Volume 49 • Number 1 • January, 1956

the journal

OF THE OKLAHOMA STATE MEDICAL ASSOCIATION

O. S. M. A.

ANNUAL MEETING

May 6, 7, 8, 9

Oklahoma City

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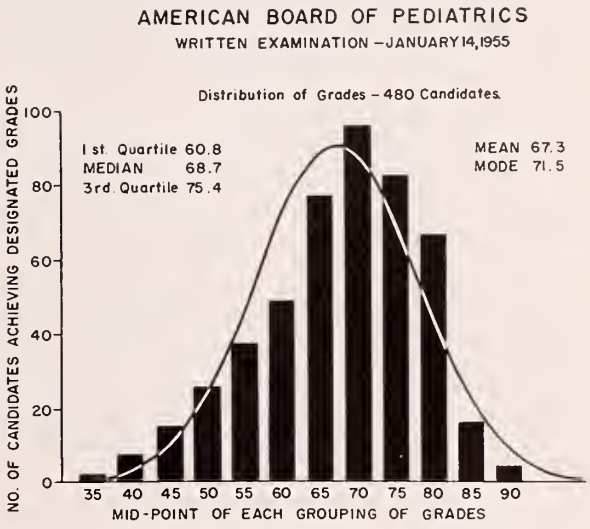
Editorials

The Mean, the Median and the Mode

The opposite graph[1] illustrates very nicely the frequency distribution curve discussed last month. In this case the variable is the grade that the examinee makes. The magnitude is the number of observations at each point on the variable when they are plotted in order. The curved line is called the frequency polygon and denotes the observations plotted in order. The rectangular figures in black constitute a histogram in which the observations are grouped around whole numbers in order. In both cases the base line (abscissa) denotes the characteristics being measured and the vertical scale (ordinate) reveals the frequency with which it occurs.

The mean is the average as we commonly use the term which is the quotient when the sum of all the grades is divided by the number of people making them. The median is the midpoint on the distribution curve with half the observations falling below and half falling above. The median rather than the mean may give a more accurate picture of what is desired. If one were interested in the average length of stay in the hospital of 100 consecutive patients who had had appendectomies and two of these patients had complications that required hospitalization for three months each, the median would more closely approximate the usual stay than would the mean. This would simply place two more people above the midpoint or move the midpoint back two places on the distribution curve. Two patients, however, accounting for 180 days of the total would make a great difference in the mean (average). The mode is the most fashionable or the point at which the greatest number of observations occur.

[1]Reprinted by permission of the Editors and the Charles C. Thomas Co. Publishers, from Pediatrics 16:732 (Nov.) 1955.



Social Security — Big Issue in '56

Every physician who is conscious of his duties as a citizen should now be taking an active interest in a timely issue which the American Medical Association considers of great importance—not only to the medical profession but to all of the American people.

That issue is HR 7225, a bill passed by the United States House of Representatives last summer near the end of the Congressional session. This bill, known as the Social Security Amendments of 1955, was first rushed through the House Ways and Means Committee without public hearings. Then it was passed in the House, by a vote of 372 to 31, under a suspension of the rules which barred amendments and limited debate to 40 minutes. The Senate Finance Committee, however, refused to take hasty action on a bill of such major importance. After hearing the many serious questions raised by Mrs. Hobby, then Secretary of the Department of Health, Education and Welfare, the Committee decided to hold extensive public hearings

during the second session of the 84th Congress.

Just what is this legislation that appears to be so politically attractive to individuals with an eye on the 1956 elections? Why was the House majority leadership so determined to avoid open hearings and normal debate? Let's take a brief look at the main provisions of the bill.

This is the legislation which would lower the Social Security retirement age for women from 65 to 62; extend monthly benefits for permanently and totally disabled children beyond the age of 18; expand compulsory social security coverage to all self-employed professional groups except physicians, and raise social security taxes over and above the increases already scheduled for the next 20 years. Those provisions alone demand careful study of their effects on the philosophy, scope and financial stability of our social security system.

The most controversial section of the bill, however, is the one which would make permanently and totally disabled persons eligible to receive their social security retirement benefits at age 50 instead of 65. It is this section which is of particular concern to the medical profession. It is of far greater concern than the question of voluntary or compulsory coverage of physicians under the social security system. This is a separate issue which we are not discussing in this editorial. The plan for a national system of permanent and total disability benefits has far more serious implications for medicine and the nation.

It raises questions such as these: Is there real need for a federal program? What are the facts on permanent and total disability? Won't this duplicate or overlap existing programs of assistance and rehabilitation? What effect will cash handouts have on a patient's incentive to be rehabilitated? Won't this extend federal control over physicians? —and, finally—How will this affect the future of medical practice? Will this lead, step by step, to the lowering and eventual elimination of the age-50 eligibility requirement; then, cash benefits for the dependents of those who are permanently and totally disabled; then, a temporary disability benefits program; then, cash benefits or direct government payments for hospital or medical costs, and then, ultimately, a full-fledged system of government health insurance?

These are but a few of the many grave quetions which already have been raised concerning this legislation. As physicians, we must be concerned over the medical aspects of the problem. As citizens, we also must be concerned over the trends and implications in the never-ending expansion of our social security system. The minority report of the House Ways and Means Committee expressed it this way:

"We do not believe that our committee has discharged its obligation to either the Congress or to the American people by its brief and closed-door consideration of this vital legislation. We have sought to point out the grave social and economic implications of the bill. We have dwelt at some length with the staggering ultimate costs of this developing program, because we do not believe that either the Congress or the public has any conception of its magnitude."

Our social security system now has reached the point where any further changes may have a profound influence on the nation's economic, social and political future. The time has come to face up to the question of just what social security should accomplish and just where it should stop. The Association strongly *urges* that the social security issue be taken out of the arena of vote-catching politics; that there be an objective, through study of social security in all its present and future aspects, and that the facts and realities emerging from such a study be used as the basis for a sound national decision on this vital issue. It especially protects precipitate action on the complex question of disability without thorough investigation of alternative mechanisms.

In our opinion, that is a reasonable, responsible policy that deserves the moral and intellectual support of every physician.

(Prepared under the authority of the offices of the Secretary-General Manager of the American Medical Association.)

Scientific Articles

Anatomic and Functional

ALTERATIONS *of the* CARPUS

Following Injury and Excision

JAMES K. STACK, M.D., F.A.C.S.

THE AUTHOR

Doctor Stack is Associate Professor of Bone and Joint Surgery, Northwestern University Medical School. He is attending surgeon, Passavant and Cook County Hospitals, Chicago. He is a diplomate, National Board of Medical Examiners and is secretary of the American Association for the Surgery of Trauma.

It would not be necessary to present the material which follows if all of us would keep in mind and put to use the known principles of the diagnosis and treatment of wrist injuries. Briefly, these principles are as follows—(1) Reject the diagnosis of sprain of the wrist until all other possible injuries have been ruled out. Fractures of the navicular bone and minor degrees of perilunar dislocation can be missed on superficial examination. The late results of such errors can be extremely disabling, and such wrists may masquerade for years under the guise of a so-called sprain. (2) Oblique x-ray films should always be taken in addition to the routine anteroposterior and lateral projections. Only in this way can the navicular bone be seen in its full length. In the routine views, the navicular is many times shortened; that is, the distal portion is superimposed upon the wrist, and fine fissures through the waist of the bone thereby obscured. (3) In instances where the navicular is suspected but the fracture cannot be proven on the original films, repeat the x-ray studies in 10 to 14 days. This will allow time for absorption of the bone to take place along the fracture line, and, thus, make the diagnosis perfectly clear. Many times a fracture will be easily visualized after this period when no line was seen in the films taken immediately after the injury. (4) Immobilize all suspected navicular fractures until it can be definitely proven that a fracture line does not exist. (5) Prolonged, uninterrupted, adequate immobilization of the wrist should be carried out until union occurs.

The late complications, most of which occur years and not months afterward, could, for the most part, be avoided if these simple rules were adhered to. Unfortunately, many of these injuries still go unrecognized until the complications become so evident that no one could miss them. These complications are the principle concern of this paper.

The carpal navicular and lunate work as a system. This system forms the intermediary joint between the radius and the capitate, and it is responsible in a large measure for the amplitude of movement that the wrist enjoys. This position, which makes these bones so important, also makes them vulnerable, for it places them in a wedge compressed between the forearm and the distal carpal row. These two bones (navicular and lunate) also participate in the formation of the carpal arches, both the transverse and the longitudinal. In fact, the lunate is the keystone of each. It is situated at the apex of the palmar groove, through which pass certain of the nerves, tendons and blood vessels to the hand and fingers. This groove is bounded by two pillars, the navicular and the greater multangular on the radial side, and the pisiform and the unciform on the ulnar side. These pillars are an important part of the thenar and hypothenar eminences.

The head of the capitate, i.e., its proximal end, is the common center of the movements of the wrist. It is a kind of rudder, merely

tilting, while the satellite bones around it describe a varied movement pattern. Recent fluoroscopic studies of the movement of various joints show that the range of motion in this part of the carpus is wider and more varied than formerly thought. The navicular and lunate, acting as a system, have an ability to conform with any position of the hand, and these bones are frequently caught compressed and fractured or dislocated when force is applied in any of their varied positions.

The carpus reacts to inflammation, whether traumatic or not, whether acute or chronic, in three general ways—(1) The acute onset is followed by capsular and ligamentous fibrosis. All the joints that make up the radial carpus, carpus and a carpometacarpus intercommunicate so that simple effusion, hemorrhage, suppuration, and the like, and the residual fibrosis will not be confined to any single space or joint, but will be widespread throughout the wrist. (2) By cystic change in the carpal bones, the distal end of the radius, and proximal ends of the metacarpals—these cystic areas are caused by the hyperemia induced by the primary lesion. Why it is so selective is not known, but the bones bearing the burden of movement and the direct application of forces are more frequently involved. In a way, it may be said that these involved parts never recover from the initial osteoporosis. The osteolytic action continues and localized replacement by fibrosis tissue takes place. The cavity usually contains, besides fibrous tissue, amorphous, calcific material and a little fluid. The relatively dense confining layer seen in the x-ray will contain some necrotic bone, and the hyaline cartilage overlying the cystic defect will be in a varying state of necrosis. There may or may not be attempts at replacement with fibrocartilage. The presence of these cysts induced originally by the initial hyperemia serve also to continue it because of the necessity to dissolve and carry away the contents of the cavity and to effect its replacement by new bone, if possible. (3) By arthritic change—This change may be brought about by the cystic lesion described before resulting in the necrosis of overlying cartilage, or the cartilage may be directly destroyed by the friction of necrotic bone or a fragment acting as a foreign body in the working mechanism of the joint. This is the so-called "sand in the bearing" picture, which is a traumatic arthritis. Whatever the basic cause, the end result is the approximation of bony surfaces and the mixture of fibrosis and bony ankylosis.

This fibrosis, cystic change and arthritis may also be brought about as a slowly-developing, chronic process over a period of years, such as the gradual re-alignment of the carpal bones necessitated by the loss of one of the two members of the navicular-lunate system. For example, if a substantial fragment of the navicular, or the entire navicular, is removed, a certain re-adjustment will result. This will consist principally in the attempt of the capitate to approximate the articular surface of the radius. This is caused by the action of the tendons of the wrist and the hand, and the gradual shortening and tightening of the supporting ligaments of the wrist. As this goes on, the lunate will gradually be displaced toward the ulnar side of the wrist, the navicular-lunate system will be disrupted, and the lunate alone will not be able to describe a normal movement pattern around the proximal end of the capitate.

The lunate, in effect, is trapped and becomes actually a supernumerary bone of the proximal row. Its attempts to conform to the demands made upon it result in a stretching or overstrain of the ligaments which support it, and this, in turn, initiates a chronic, inflammatory process. In time, this will be followed by the fibrosis, the cystic change and the cartilaginous degeneration described before. The degeneration will be enhanced by the scraping effect of any cartilaginous surface that is working out of alignment, and, in this sense, it is analogous to the chondromalacia of the patella that develops when the bone rides laterally over the femoral condyle in cases of extreme valgus deformity of the knee. It is also seen in those instances where the alignment of the leg above the ankle has been altered in a medial lateral direction, so that a cross-strain is borne upon this weight-bearing joint. It is true that the wrist, being a non-weight-bearing joint, will not react as quickly as the others, but, certainly, the direct and torsional forces applied to the wrist of a laborer will



Fig. 1



Fig. 2



Fig. 3 The anatomic and functional re-adjustment that takes place following excision of the navicular and lunate bones. Above: Flexion and extension. Below: Radial and ulnar deviation.

Fig. 1 Extensive cystic and arthritic change in the capitate bone and radiocarpal joint. Note in the upper illustration the dislocation of the lunate volarward. It has been gradually forced out of position by the pressure of the capitate in its effort to fill the space caused by the navicular collapse.

Fig. 2 Collapse of the necrotic navicular. Note the ulnar displacement of the lunate and the proximity of the multingular bones to the styloid process of the radius. This is caused by the general shortening of the carpus and the attempt of the capitate to articulate with the radius.

be almost as great as those applied to the lower extremity in just ordinary weight-bearing activity.

Having these inevitable and disabling pathologic changes in mind, what is the proper management during the various stages of complications? When the original diagnosis has not been made, and we are forced to prescribe treatment, what are the methods that should be used in the various phases of these complications?

The varying situations that must be met will vary from simple non-union with no other change to a complete degenerative arthritis involving practically the whole wrist. (1) In the case of non-union seen, let us say, four to six months after the fracture, with both fragments viable, simple immobolization in an adequate plaster cast should be tried. The cast should permit free motion of all the joints of the fingers, but should permit no motion in the thumb except in its interphalangeal joint. The wrist should be held in a position of comfortable dorsiflexion and neutral, as far as radial and ulnar deviation is concerned. It should extend upward to the junction of the middle and upper thirds of the forearm. This cast should be continued for nine to 12 months. (2) If non-union still persists over this period of

time, or, if a patient presents himself with an established non-union and substantial absorption along the fracture line, a drilling procedure or bone-grafting procedure is in order. This is followed by prolonged immobilization until union is complete. If these methods are to succeed, both fragments must be viable, and the separation must be minimal. Such an attempt to obtain union is particularly important in the wrist of a laboring man. If, however, his occupation and his habits and avocations place no great demand on the wrist, it may be permissible to reject treatment and allow the non-union to persist. The degenerative changes may be very slow in development under these circumstances, and may be minimal, so that pain or discomfort will be experienced only when the wrist is put to hard or unusual use. (3) In the older cases of non-union, with both fragments viable, but with slight to moderate cystic change along the fracture line and no arthritic change, bone-grafting and immobilization are the methods of choice. (4) Those cases in which there is necrosis of either fragment, substantial cystic change, and definite arthritic change in the radial carpal articulation are best treated by excision of the proximal row of the carpal bones, followed by early motion and intensive physical therapy aid. (5) Occasionally, there will be seen a wrist in which the navicular fragments are necrotic and collapsed, cystic change present in many of the other carpal bones, and so much arthritic change that the radial carpal and the intercarpal spaces can hardly be defined. These wrists should be fused in the position of function, being careful to preserve the distal radial ulnar joint so that supination and pronation of the forearm will not be affected.

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Indications, Technique and Aftercare of TRACHEOTOMY

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THE AUTHOR

Doctor Shepard graduated from Tulane Universtity School of Medicine and served his internship and four year residency at Charity Hospital in New Orleans. He is engaged in the practice of general surgery in Tulsa.

This paper is based on 60 tracheotomies performed and followed by me. The technique to be described was used on all cases. In the day-to-day, and sometimes hour-to-hour, observation and management of the many problems and complications which attend tracheotomies, experiences were gained which form the basis of this report.

Indications for tracheotomy may be broadly grouped into three classes: (1) upper respiratory obstruction, (2) muscular paralyses with inability to handle secretions, and (3) as an aid to breathing and maintaining respiratory exchange in chest and lung injuries. The airway may become obstructed from glottic edema, laryngeal paralysis, foreign bodies, and tumors of the hypopharynx, larynx, trachea or thyroid. The most common of these, in my experience, is glottic edema from acute laryngotracheitis in young children. There were seven cases of this, with six recoveries and one death. The decision to perform tracheotomy in an acutely ill child is a difficult one to make. If one waits too long, death may occur from fatigue, anoxia and complete respiratory obstruction. On the other hand, tracheotomy is difficult

technically on a small infant, and even greater are the difficulties of constantly maintaining an open airway through a tube smaller than a soda straw. The definite risk of tracheotomy in this age group is shown by two cases who died from a plug of mucous in the small tube.

My procedure in these situations is to perform immediate tracheotomy if exhaustion, extreme restlessness, pale shock-like state, slowing respirations, or marked sternal and neck retractions are present. One should never wait for cyanosis as death may come first. If the child is still vigorous and does not seem in urgent danger, one may try a few hours in a well-humidified oxygen tent with the atmosphere saturated with alevaire. Antihistamines and decongestant nose drops, but no sedation, are used. This program is continued as long as the child maintains itself or shows any improvement. Tracheotomy is done at the first signs of worsening or exhaustion.

Obstruction from tumors comprise six cases of my series. Two of these were advanced carcinoma of the larynx and three were from thyroid tumors. Of the thyroid tumors, two were carcinoma and one a benign adenoma which nearly caused the patient's death from acute obstruction before an airway could be established. There is a fairly constant pattern in these cases. The patient is conscious of difficult breathing, particularly on lying down, for many weeks or months, before a sudden or acute obstruction occurs, apparently from secondary edema. Three of my six cases were done as acute emergencies on unconscious patients who had suddenly obstructed from a tumor known to be present for a long time.

Tracheotomy is of value in poliomyelitis, cerebral vascular accidents, barbiturate poisoning, tetanus, botulism, status asthmaticus and after radical mouth and neck surgery. In these conditions, excessive secretions are formed which cannot be handled by the patient, who is already handicapped by paralysis, poor or absent cough reflex and inability to turn or to communicate his desires. Tracheotomy may usually be performed unhurriedly in these conditions. It facilitates nursing care greatly and enables the attendants to keep the airway free and clean of secretions at all times. If done on a patient with poliomyelitis, one should be careful that the opening is established high enough to be handled easily in a respirator.

Tracheotomy has been found of aid in traumatic tracheobronchial and chest injuries (nine cases), pulmonary edema (two cases), and postpneumonectomy (two cases). A tracheotomy bypasses approximately 300 cc. of dead air space in the average adult, and this makes a great deal of difference to a person laboring to survive with one lung removed, crushed, or filled with fluid. The ineffecutal cough and increased secretions common to these injuries are easily handled by the direct catheter suction thus afforded.

The majority of tracheotomies are not done in the operating room. In 60 cases, 16 were done with operating room facilities, 29 were done in bed, and 15 in a respirator. Since circumstances are usually less than ideal, one must be prepared to do tracheotomy with little or no assistance, with only a few instruments, a token of sterile technique, under poor light, a minimum of anesthesia, on an unconscious or struggling patient, where haste is essential. Under these circumstances, only a direct, simple technique will do. A pack containing knife, scissors, hemostats, Allis forceps, towels, syringes, gloves, suture, and numbers one, three and five tubes should always be sterile and ready in an accessible place.

A midline incision is to be preferred to the transverse. It is easier, faster, can be performed under all circumstances, bleeding is less, tissue planes are disturbed less, there is no dependent pocket under the lower flap in which secretions can collect and cause infection, and the scar is satisfactory. The only advantage of the transverse incision is an allegedly better scar, but this advantage does not out-weigh its disadvantages. I have had to do a plastic on only one scar in this series, on an 18 year old girl who wished a better cosmetic result.

A folded sheet or small sand bag is placed between the shoulder blades and the head allowed to drop back in mild hyperextension. After infiltration with local anesthetic, a midline incision is made through the skin and platysma with its upper end about one cm. below the cricoid cartilage. With experi-

ence this incision can be kept short—about two to three centimeters. The edges of the skin are grasped with Allis tissue forceps and separated and tented up. Being careful to keep in the exact midline, closed scissors are thrust into the subcutaneous tissues and the blades strongly separated in the direction of the incision. The tissues so separated are grasped with a second pair of Allis forceps, the first being dropped or removed for latter application. The subcutaneous tissues are tented up and separated by traction on the Allises while the scissors are again separated in the midline, separating the strap muscles, which in their turn are grasped with Allises and tented up. This brings into view the trachea and isthmus of the thyroid covered with areolar tissue, which in its turn is separated until the trachea is bare. If it is desired to keep the tracheotomy high, the thyroid isthmus is partially divided between Allises. After the trachea has been cleaned it is incised in the midline, two cartilaginous rings being cut. The edges of the incision are again grasped with Allis forceps and separated while a tracheotomy tube is inserted.

It is seldom necessary to ligate a single vessel in this procedure. Occasionally bridging vessels between the anterior jugulars or other aberrant vessels will require ligation, but excessive bleeding is usually indicative of having strayed from the midline. After the initial incision one should orient oneself frequently by palpating the trachea and thus be sure of the location of the midline.

After the tracheotomy tube has been inserted, all blood and secretions are aspirated from the trachea and any bleeders ligated if necessary. Two or three mattress sutures of silk are then placed in the skin. The deep tissues are not sutured and the skin should be left very loose about the tube to permit free drainage and to prevent subcutaneous emphysema.

The size tube to use in any individual patient is somewhat a matter of experience. All sizes should always be available and the final selection may be made after the trachea is exposed. Small infants require a 0 to one size, children two years old and over will usually accept a number two. At five a number three may be selected, and after the age of eight, a number four. An adult woman should have a number five and an adult man a number six. The largest acceptable size should be used because of the mechanical difficulties of aspirating and keeping open a small tube.

The technique described is sufficiently rapid, even under the most extreme circumstances, provided the tracheotomy pack and tubes are available and open. If they are not, a life-saving cricothyroid tracheotomy may be performed with only a knife. A knife blade is plunged transversely between the palpated thyroid and the cricoid cartilages, through the cricothyroid membrane. The knife handle is then placed into the trachea and twisted to a longitudinal position. As soon as conditions permit, a second tracheotomy should be performed in the usual position and the first incision closed. If it is used as a permanent site, laryngeal stenosis will probably result.

Postoperative care of a tracheotomized patient requires both knowledge and vigilance. Specially-trained nurses are greatly to be desired. In my series, three patients were lost because of mucous plugs occluding the tube and in two of these a special nurse was by the bedside at the time!

A beveled catheter for suction should be constructed by cutting and trimming the end of an ordinary French catheter. Its size depends on the size of the tube. A small hole may be cut toward the bell end, or a Y tube may be used as a connector so that suction may be made and broken with the thumb. By twisting the tracheotomy tube with one hand, the catheter may be "pointed" down the right or left bronchus to aspirate either side. Remember that breathing is difficult or impossible during suction so that each aspiration should be brief. The airway should be suctioned as often as necessary to keep it free of secretion. Oxygen is administered through a bent 18 gauge needle placed in the tracheotomy tube opening.

The inner cannula should be removed at least every two hours at first, then several times a day for cleaning. It should never be left out, as then the outer cannula may become encrusted and obstructed. Pipe cleaners are very useful for cleaning the cannula. I prefer not to change the outer cannula for

72 hours, if possible. At the end of this time the sinus tract has become formed and the lips of the tracheal incision will remain open for easy passage of the replacement tube. The outer tube may then be replaced as often as necessary to maintain a clean and neat tracheotomy.

The atmosphere should be kept as humid as posible with steam or other sources of water vapor. This substitutes for the humidifying action of the upper respiratory tract which has been bypassed. If humidification is not possible, one should instill 2 to 5 cc. of saline or Ringer's solution down the tracheotomy with a medicine dropper every two to four hours.

I should like to warn of one circumstance which may be both puzzling and dangerous because it was apparently the cause of death in two cases. The patient will exhibit difficult respirations, restlessness and perhaps cyanosis. Suctioning obtains little mucous but produces much relief, but after a short time the episode will be repeated with ultimate asphyxiation of the patient if suction is not repeated in time. I believe the cause of this is a large plug of inspissated mucous which occludes the end of the tracheotomy tube. When the suction catheter is passed this plug is dislodged downward, but not removed, and it soon makes its way back to the end of the tracheotomy tube. If one suspects this is the case, the mucuous plug may often be removed by removing the outer and inner cannulas and suctioning directly down the sinus with the catheter. If the plug cannot be obtained by this maneuver, the patient should be immediately bronchoscoped. Bronchoscopy is easily done through the tracheotomy sinus.

When the tracheotomy is no longer necessary, decannulation may be started by daily inserting a smaller size tube until a size one or two is in place. The last 24 hours the opening of this may be taped over to entirely accustom the patient to breathing through his nose again, after which the tube may be removed completely. One should not make the mistake of taping or corking the tube before the smallest one possible is in place. If a large size tube is completely occluding the trachea and this is then taped or corked, one could expect the patient to show great distress and the erroneous conclusion may be reached that the patient cannot tolerate decannulation.

The wound needs no care after the tube is removed. The sinus is usually closed in 24 hours and the wound is epithelized and healed in a few days. No sutures are necessary and any one may expect an acceptable scar.

Joins School of Medicine Staff

Three professors joined the fulltime faculty of the University of Oklahoma School of Medicine during November.

Dr. William Seeman has assumed the newly-created position of Associate Professor of Medical Psychology in the Department of Psychiatry. He has been Chief of the Clinical Psychology Department of the Mayo Clinic, Rochester, Minn., since 1950.

Dr.H Herbert H. Kent has been appointed Associate Professor of Physical Medicine and will instruct medical students and students in the new physical therapy school. Dr. Kent has been Chief of the Physical Medicine and Rehabilitation Department of the VA Hospital in Indianapolis for the last six years.

Dr. Earl G. Larsen has been appointed Assistant Professor of Biochemistry. He has been a research Associate in the Department of Chemistry at Wayne University College of Medicine, Detroit.

Abridged OKLAHOMA LIFE TABLES, *1949-1951*

JOHN C. BELCHER, Ph.D., and JAMES D. TARVER, Ph.D.

The improvement of the health of the people in Oklahoma, especially the decline in infant mortality and increase in longevity, is of vital concern to the Oklahoma State Medical Association, the Oklahoma State Department of Health, and all citizens of the State. Life tables make it possible to measure the health progress of not only the total population but also the various subgroups which compose it. Age-specific death rates and average life expectancy may be used in comparing Oklahoma with other states as well as for determining changes which have occurred within the State over a period of years.

Life tables are also useful as a means of estimating the number of survivors in a given population at future dates. By comparing the number of survivors, computed from life tables with actual population counts, it is possible to estimate the net migration of people from or to certain areas during the time interval under consideration.

The purpose of this paper is to make available life table data, based on 1949, 1950, and 1951 deaths, for the Oklahoma population cross-classified by race, residence, and sex.

Need to Distinguish between the Life Span and Life Expectancy. In 1900, the average infant born in the United States could expect to live approximately 47 years. By 1950, life expectancy in this country at birth had reached 68.4 years.[1] The greater part of the increase in longevity has been the result of saving the lives of infants and children. A larger proportion of the population survives a larger part of the normal life span than in the past. Many people have assumed that similar increases in life expectancy may be anticipated with further advancements in medical care along with improvements in diet, housing, and sanitation. However, a study of life tables shows that it is quite improbable that the second half of the present century can duplicate the accomplishments of the first half in improving the average length of life.[2] The reason for this statement is that man is a finite being and the "life span"—the extreme limit set to human life by old age—has probably not changed since Biblical times.[3] Barring all accidents and diseases, every individual would eventually die. Life expectancy at birth can, of course, never exceed the life span, and life expectancy in this nation already may be so high for some groups that little increase can be expected unless the life span is first increased. There is still considerable opportunity to lower the death rates of certain groups, but, "Any appreciable increase in the expectation of life at ages over 40 seems to await the conquering of the degenerative diseases of the circulatory system, the respiratory system, and the other vital organs."[4] Improvements in longevity during the past 50 years have greatly increased the chances of survival to the forties and fifties and even to the threshold of old age, but between 1900 and 1950, the expectation of life at age 65 only increased from 11.9 to 14.1 years.[5] At age 85, it is doubtful that there has been any statistically significant change in life expectancy in the past century.

How Life Expectancy Has Increased. Table I shows the changes in the death rates for the United States at different ages by decades between 1900 and 1950. It may be noted that declines in infant mortality, and the death rates of children, youth, and young adults have been truly phenomenal. How-

THE AUTHORS

John C. Belcher, Ph.D. and James D. Tarver, Ph.D. were co-authors of the explanatory article on the life tables. Doctor Belcher, formerly associate professor of Sociology and Rural Life at Oklahoma A. and M. College, is now with the University of Georgia. Doctor Tarver is also associated with the Department of Sociology and Rural Life at Oklahoma A. and M.

ever, the decreases in death rates at the advanced ages have been relatively minor. Through more adequate medical care and improved living conditions, infant and maternal mortality have been greatly reduced. (The communicable diseases which two generations ago took a terrific toll of children and young adults largely have been brought under control.) Many of the leading causes of death at the beginning of the Twentieth Century such as typhoid, scarlet fever, diphtheria, and smallpox have been almost eradicated from our society. Consequently, an increasing proportion of the population is reaching the advanced ages where the as yet unconquered degenerative diseases reap a prodigious harvest. In the United States in 1900, only 66 out of every 100 newly born infants could expect to live to age 40, but by 1950, the chance of survival to age 40 had increased to 92 in 100.[6]

Still, the life tables presented here do indicate certain segments of the population of Oklahoma where further increases in longevity can be expected. Except for differentials in mortality related to age, and to some extent sex, the differences in the death rates from one group to another tend to be environmentally determined. Thus, it is logical to suppose that the groups with the highest death rates can have them lowered sufficiently to compare favorably with those groups now experiencing low mortality. (Accomplishing this end might be considered the major goal of medical practitioners.)

Interpretation of Life Tables for Oklahoma, 1949-1951. An analysis of the eight Abridged Oklahoma Life Tables presented here (Tables II-IX) permits several conclusions to be drawn:

1. As has been found in numerous studies in other areas, females have longer life expectancy than males, whites live on the average longer than nonwhites, and the life expectation of rural persons is greater than that of urban residents.

2. Rural white females have the longest expectation of life (74 years at birth); whereas, the lowest average length of life is the 60 years for the urban nonwhite male.

3. Mortality rates are high for all groups the first year of life. After age one, these rates drop rapidly and reach a low point at approximately 10 years of age. From age 10 through the twenties, death rates remain low but continue to steadily increase. With increasing age, the mortality rates progressively become greater and by age 75, the rates are very high.

4. Because mortality rates are high the first year of life, the average expectation of life is greater at age one than at birth. Of course, in general, with increasing age the average future lifetime declines until it reaches a figure of around five years for those age 85.

5. In the upper age brackets, the well-known differentials in life expectancy tend

DEATH RATES BY AGE: DEATH-REGISTRATION STATES, 1900-1950

(Exclusive of fetal deaths. Rates per 1,000 estimated midyear population in each specified group)

Year	Total	Under 1 Year	1-4 Years	5-14 Years	15-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75-84 Years	85 Years and Over
1950	9.6	33.0	1.4	0.6	1.3	1.8	3.6	8.5	19.1	40.7	93.3	202.0
1940	10.8	54.9	2.9	1.0	2.0	3.1	5.2	10.6	22.3	48.0	112.0	235.7
1930	11.3	69.0	5.6	1.7	3.3	4.7	6.8	12.2	24.0	51.4	112.7	228.0
1920	13.0	92.3	9.9	2.6	4.9	6.8	8.1	12.2	23.6	52.5	118.9	248.3
1910	14.7	131.8	14.0	2.9	4.5	6.5	9.0	13.7	26.2	55.6	122.2	250.3
1900	17.2	162.4	19.8	3.9	5.9	8.2	10.2	15.0	27.2	56.4	123.3	260.9

NOTE: Death-registration States increased in number from only 10 States and the District of Columbia in 1900 to the entire continental United States by 1933.

Source: Vital Statistics of the United States, 1950, Volume 1, U. S. Department of Health, Education, and Welfare, Public Health Service, 1954, p. 190.

TABLE I

LIFE TABLE FOR URBAN, WHITE MALES, OKLAHOMA, 1949-1951

Year of Age	Mortality Rate	Of 100,000 Born Alive		Stationary Population		Average Future Lifetime
Age Interval	Number dying per 1000 alive at beginning of year of age	Number living at beginning of year of age	Number dying during year of age	In year of age	In year of age and all later years	Average number of years of life remaining at beginning of year of age
(1)	(2)	(3)	(4)	(5)	(6)	(7)
x to x + 1	$_nq_x$	l_x	d_x	L_x	T_x	e_x
Under 1	.03388	100,000	3,388	98,305	6,620,863	66.21
1-4	.00556	96,612	537	385,222	6,522,558	67.51
5-9	.00410	96,075	394	479,319	6,137,336	63.88
10-14	.00289	95,681	277	479,239	5,658,017	59.13
15-19	.00733	95,404	699	474,864	5,178,778	54.28
20-24	.00807	94,705	764	471,605	4,703,914	49.67
25-29	.00740	93,941	695	467,699	4,232,309	45.05
30-34	.01045	93,246	974	463,810	3,764,610	40.37
35-39	.01536	92,272	1.417	457,835	3,300,800	35.77
40-44	.02292	90,855	2,082	449,288	2,842,965	31.29
45-49	.03717	88,773	3,300	436,277	2,393,677	26.96
50-54	.05878	85,473	5,024	415,584	1,957,400	22.90
55-59	.08938	80,449	7,191	385,349	1,541,816	19.17
60-64	.13714	73,258	10,047	342,445	1,156,467	15.79
65-69	.18255	63,211	11,539	288,403	814,022	12.88
70-74	.26247	51,672	13,562	225,290	525,619	10.17
75-84	.68431	38,110	26,079	247,349	300,329	7.88
85 and over	1.0000	12,031	12,031	52,980	52,980	4.40

TABLE II

LIFE TABLE FOR RURAL, WHITE MALES, OKLAHOMA, 1949-1951

Under 1	.02841	100,000	2,841	98,738	6,873,386	68.73
1-4	.00730	97,159	709	387,009	6,774,648	69.73
5-9	.00380	96,450	367	481,627	6,387,639	66.23
10-14	.00407	96,083	391	479,755	5,906,012	61.47
15-19	.00724	95,692	693	477,273	5,426,257	56.71
20-24	.01234	94,999	1,172	472,010	4,948,984	52.10
25-29	.00989	93,827	928	466,801	4,476,974	47.72
30-34	.01107	92,899	1,028	461,815	4,010,173	43.17
35-39	.01456	91,871	1,338	456,499	3,548,358	38.62
40-44	.01715	90,533	1.553	449,233	3,091,859	34.15
45-49	.02850	88,980	2,536	439,058	2,642,626	29.70
50-54	.04435	86,444	3,834	423,272	2,203,568	25.49
55-59	.07119	82,610	5,881	399,280	1,780,296	21.55
60-64	.08927	76,729	6,850	367,568	1,381,006	18.00
65-69	.13929	69,879	9,733	326,260	1,013,438	14.50
70-74	.20765	60,146	12,489	270,641	687,178	11.43
75-84	.61511	47,657	29,314	330,299	416,537	8.74
85 and over	1.00000	18,343	18,343	86,248	86,248	4.70

TABLE III

LIFE TABLE FOR URBAN WHITE FEMALES, OKLAHOMA, 1949-1951

Year of Age	Mortality Rate	Of 100,000 Born Alive		Stationary Population		Average Future Lifetime
Age Interval	Number dying per 1000 alive at beginning of year of age	Number living at beginning of year of age	Number dying during year of age	In year of age	In year of age and all later years	Average number of years of life remaining at beginning of year of age
(1)	(2)	(3)	(4)	(5)	(6)	(7)
x to x + 1	$_nq_x$	l_x	d_x	L_x	T_x	e_x
Under 1	.02541	100,000	2,541	98,733	7,372,081	73.72
1-4	.00541	97,459	440	389,725	7,273,348	74.63
5-9	.00263	97,019	255	483,871	6,883,623	70.95
10-14	.00190	96,764	184	482,940	6,399,752	66.14
15-19	.00319	96,580	308	482,003	5,916,812	61.26
20-24	.00379	96,272	365	480,896	5,434,809	56.45
25-29	.00438	95,907	420	478,360	4,953,913	51.65
30-34	.00615	95,487	587	476,075	4,475,553	46.87
35-39	.00903	94,900	857	472,697	3,999,478	42.14
40-44	.01279	94,043	1,203	467,548	3,526,781	37.50
45-49	.01711	92,840	1,588	460,423	3,059,233	32.95
50-54	.02586	91,252	2,360	450,898	2,598,810	28.48
55-59	.04011	88,892	3,565	436,139	2,147,912	24.16
60-64	.06094	85,327	5,200	414,475	1,711,773	20.06
65-69	.09851	80,127	7,893	382,024	1,297,298	16.19
70-74	.15871	72,234	11,464	333,838	915,274	12.67
75-84	.54768	60,770	33,283	445,532	581,436	9.57
85 and over	1.00000	27,487	27,487	135,904	135,904	4.94

TABLE IV

LIFE TABLE FOR RURAL, WHITE FEMALES, OKLAHOMA, 1949-1951

Under 1	.02310	100,000	2,310	98,848	7,397,141	73.97
1-4	.00563	97,690	550	389,794	7,298,293	74.71
5-9	.00333	97,140	323	483,533	6,908,499	71.12
10-14	.00244	96,817	236	482,618	6,424,966	66.36
15-19	.00381	96,581	368	482,307	5,942,348	61.53
20-24	.00485	96,213	467	480,453	5,460,041	56.75
25-29	.00511	95,746	489	477,539	4,979,588	52.01
30-34	.00607	95,257	578	474,938	4,502,049	47.26
35-39	.00830	94,679	786	471,789	4,027,111	42.53
40-44	.01093	93,893	1,026	466,788	3,555,322	37.87
45-49	.01755	92,867	1,630	460,712	3,088,534	33.26
50-54	.02314	91,237	2,111	451,165	2,627,822	28.80
55-59	.03468	89,126	3,091	438,440	2,176,657	24.42
60-64	.05329	86,035	4,585	419,449	1,738,217	20.20
65-69	.09771	81,450	7,958	388,498	1,318,768	16.19
70-74	.15035	73,492	11,050	341,186	930,270	12.66
75-84	.55345	62,442	34,559	455,713	589,084	9.43
85 and over	1.00000	27,883	27,883	133,371	133,371	4.78

TABLE V

LIFE TABLE FOR URBAN, NON-WHITE MALES, OKLAHOMA, 1949-1951

Year of Age	Mortality Rate	Of 100,000 Born Alive		Stationary Population		Average Future Lifetime
Age Interval	Number dying per 1000 alive at beginning of year of age	Number living at beginning of year of age	Number dying during year of age	In year of age	In year of age and all later years	Average number of years of life remaining at beginning of year of age
(1)	(2)	(3)	(4)	(5)	(6)	(7)
x to x + 1	$_nq_x$	l_x	d_x	L_x	T_x	e_x
Under 1	.05311	100,000	5,311	97,364	5,995,285	59.95
1-4	.01178	94,689	1,115	376,562	5,897,921	62.29
5-9	.00531	93,574	497	467,105	5,521,359	59.01
10-14	.00614	93,077	571	463,851	5,054,254	54.30
15-19	.01050	92,506	971	460,190	4,590,403	49.62
20-24	.02167	91,535	1,984	453,071	4,130,213	45.12
25-29	.01711	89,551	1,532	444,187	3,677,142	41.06
30-34	.02164	88,019	1,905	435,827	3,232,955	36.73
35-39	.03225	86,114	2,777	424,099	2,797,128	32.48
40-44	.04588	83,337	3,824	407,806	2,373,029	28.48
45-49	.06127	79,513	4,872	386,207	1,965,223	24.72
50-54	.09386	74,641	7,006	356,739	1,579,016	21.15
55-59	.13577	67,635	9,183	315,654	1,222,277	18.07
60-64	.16851	58,452	9,850	268,737	906,623	15.51
65-69	.20456	48,602	9,942	219,083	637,886	13.12
70-74	.27404	38,660	10,594	167,399	418,803	10.83
75-84	.62471	28,066	17,533	192,863	251,404	8.96
85 and over	1.00000	10,533	10,533	58,541	58,541	5.56

TABLE VI

LIFE TABLE FOR RURAL, NON-WHITE MALES, OKLAHOMA, 1949-1951

Under 1	.04235	100,000	4,235	97,908	6,246,909	62.47
1-4	.01522	95,765	1,458	380,480	6,149,001	64.21
5-9	.00397	94,307	374	470,440	5,768,521	61.17
10-14	.00712	93,933	669	468,160	5,298,081	56.40
15-19	.00922	93,264	860	464,614	4,829,921	51.79
20-24	.01453	92,404	1,343	458,988	4,365,307	47.24
25-29	.02881	91,061	2,623	449,067	3,906,319	42.90
30-34	.03123	88,438	2,762	435,784	3,457,252	39.09
35-39	.02673	85,676	2,290	422,977	3,021,468	35.27
40-44	.03846	83,386	3,207	409,422	2,598,491	31.16
45-49	.05926	80,179	4,751	389,746	2,189,069	27.30
50-54	.06756	75,428	5,096	365,226	1,799,323	23.85
55-59	.08531	70,332	6,000	337,553	1,434,097	20.39
60-64	.11855	64,332	7,627	303,635	1,096,544	17.05
65-69	.15441	56,705	8,756	262,683	792,909	13.98
70-74	.23960	47,949	11,489	211,884	530,226	11.06
75-84	.62647	36,460	22,841	250,142	318,342	8.73
85 and over	1.00000	13,619	13,619	68,200	68,200	5.01

TABLE VII

LIFE TABLE FOR URBAN, NON-WHITE FEMALES, OKLAHOMA, 1949-1951

Year of Age	Mortality Rate	Of 100,000 Born Alive		Stationary Population		Average Future Lifetime
Age Interval	Number dying per 1000 alive at beginning of year of age	Number living at beginning of year of age	Number dying during year of age	In year of age	In year of age and all later years	Average number of years of life remaining at beginning of year of age
(1)	(2)	(3)	(4)	(5)	(6)	(7)
x to x + 1	${}_nq_x$	l_x	d_x	L_x	T_x	e_x
Under 1	.03774	100,000	3,774	98,125	6,458,503	64.59
1-4	.00758	96,226	729	383,482	6,360,378	66.10
5-9	.00272	95,497	260	477,064	5,976,896	62.59
10-14	.00459	95,237	437	475,517	5,499,832	57.75
15-19	.00952	94,800	902	471,511	5,024,315	53.00
20-24	.01330	93,898	1,249	466,741	4,552,802	48.49
25-29	.01422	92,649	1,317	460,007	4,086,063	44.10
30-34	.02166	91,332	1,978	452,114	3,626,056	39.70
35-39	.02926	89,354	2,614	440,661	3,173,942	35.52
40-44	.04238	86,740	3,676	425,168	2,733,281	31.51
45-49	.05541	83,064	4,603	404,624	2,308,113	27.79
50-54	.08915	78,461	6,995	375,853	1,903,489	24.26
55-59	.10908	71,466	7,796	338,957	1,527,636	21.38
60-64	.12952	63,670	8,247	298,826	1,188,679	18.67
65-69	.11046	55,423	6,122	262,657	889,853	16.06
70-74	.20444	49,301	10,079	222,244	627,196	12.72
75-84	.53306	39,222	20,908	290,841	404,952	10.32
85 and over	1.00000	18,314	18,314	114,111	114,111	6.23

TABLE VIII

LIFE TABLE FOR RURAL, NON-WHITE FEMALES, OKLAHOMA, 1949-1951

Under 1	.03693	100,000	3,693	98,171	6,564,871	65.65
1-4	.01151	96,307	1,108	382,861	6,466,700	67.15
5-9	.00441	95,199	420	475,113	6,083,839	63.91
10-14	.00382	94,779	362	473,203	5,608,726	59.18
15-19	.00943	94,417	890	469,905	5,135,523	54.39
20-24	.01533	93,527	1,434	464,529	4,665,618	49.89
25-29	.01670	92,093	1,538	456,786	4,201,089	45.62
30-34	.01961	90,555	1,776	448,598	3,744,303	41.35
35-39	.03016	88,779	2,678	437,796	3,295,705	37.12
40-45	.04174	86,101	3,594	422,178	2,857,909	33.19
45-45	.05282	82,507	4,358	402,364	2,435,731	29.52
50-54	.05715	78,149	4,466	380,279	2,033,367	26.02
55-59	.07635	73,683	5,626	355,222	1,653,088	22.44
60-64	.09151	68,057	6,228	325,647	1,297,866	19.07
65-69	.12073	61,829	7,465	291,488	972,219	15.72
70-74	.18973	54,364	10,314	247,054	680,731	12.52
75-84	.60453	44,050	26,630	308,150	433,677	9.85
85 and over	1.00000	17,420	17,420	125,527	125,527	7.21

TABLE IX

to disappear. For example, above the age of 70, there are no differences in length of life by residence and those by sex are relatively small. The most significant differential at age 85 is that nonwhites live longer than whites. Life tables constructed for other states usually show this same relationship in the advanced ages.

Methodological Note. This study has presented selected life table values computed for the white and nonwhite, male and female, and rural and urban populations of Oklahoma, based on mortality experience for the three years 1949, 1950, and 1951. The Reed-Merrell method for constructing abridged life tables was followed.[7]

The Oklahoma State Department of Health supplied special tabulations of Oklahoma deaths in 1949 and 1951 by place of usual residence for the rural and urban populations. The National Office of Vital Statistics supplied special tabulations of deaths for the year 1950. Deaths were classified by residence, according to the size of the city in the 1950 census enumerations using the "old urban" definition. In the construction of life tables, it is customary to average the deaths for the three years in order to minimize fluctuations in mortality rates among age groups.

It was necessary to estimate the population for each of the eight sex-race-residence groups as of July 1, 1950, the midpoint of the three years 1949, 1950, and 1951. This was done by obtaining the population for each of the age categories in Oklahoma on April 1, 1940 and comparing with the number of people of this group remaining in the State on April 1, 1950. Then, the average rate of change per quarter during the decade was computed after subtracting the 1940 population from the 1950 population and by dividing by 40. Each of these values was subtracted (or added) to the proper April 1, 1950 population group. For ages under 10, the population estimates were based on the census figures changed by the number of births and deaths in the three-month period ending July 1, 1950 plus corrections for underenumeration of children under five in the 1950 census.[8]

*The authors are grateful to Mrs. Lorene McEwen who did the computational work for this study.

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Appointed Chairman

Dr. Joseph M. White, Jr. has been appointed fulltime Chairman of the Department of Anesthesiology at the University of Oklahoma School of Medicine effective December 15. Dr. White has been on the faculty of the University of Washington School of Medicine since June, 1954.

A native of Dallas, Tex., Dr. White received his B.S. from Southern Methodist University and his M.D. from Southwestern Medical College, Dallas.

Receives Grant

The University of Oklahoma School of Medicine has received a two-year grant (totaling $25,148) from the National Institute of Health to study the relationship between stressful life experiences and fat-changes in the blood. The work will be conducted by Dr. Stewart Wolf, Head of the Department of Medicine, and Dr. James F. Hammarsten, Associate Professor of Medicine.

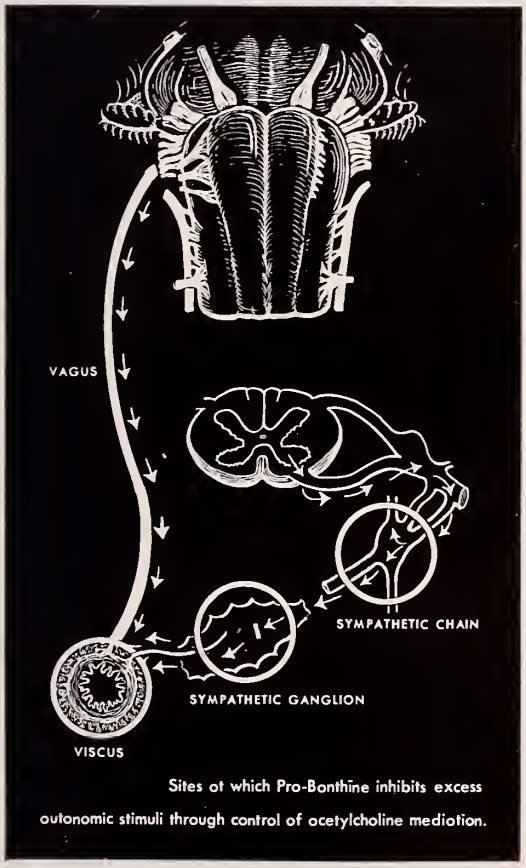
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Roback and Beal[2] found that Pro-Banthine orally was an "inhibitor of spontaneous and histamine-stimulated gastric secretion" which "resulted in marked and prolonged inhibition of the motility of the stomach, jejunum, and colon. . . ."

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In Roback and Beal's[2] series "Side effects were almost entirely absent in single doses of 30 or 40 mg. . . ."

Pro-Banthine (β-diisopropylaminoethyl xanthene-9-carboxylate methobromide, brand of propantheline bromide) is available in three dosage forms: sugar-coated tablets of 15 mg.; sugar-coated tablets of 15 mg. of Pro-Banthine with 15 mg. of phenobarbital, for use when anxiety and tension are complicating factors; ampuls of 30 mg., for more rapid effects and in instances when oral medication is impractical or impossible.

For the average patient one tablet of Pro-Banthine (15 mg.) with each meal and two tablets (30 mg.) at bedtime will be adequate. G. D. Searle & Co., Research in the Service of Medicine.

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1. Schwartz I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: Gastroenterology *25*:416 (Nov.) 1953.

2. Roback, R. A., and Beal, J. M.: Gastroenterology *25*:24 (Sept.) 1953.

Clinical trial packages of Pro-Banthine and the new booklet, "Case Histories of Anticholinergic Action," are available on request to . . .

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Association Activities

HAVE YOU HEARD?

WILEY T. MCCOLLUM, M.D., Oklahoma City, received notice on December 7, 1955, from the American Board of Internal Medicine that he has been certified in the sub-specialty of Cardiovascular Disease. Doctor McCollum is likewise a member of the American Board of Internal Medicine.

THE LESLIE-MCCAULEY CLINIC of Okmulgee is opening a branch office in Morris on Tuesday and Thursday afternoons. CLEVE BELLER, M.D. will be in charge of the office.

TURNER BYNUM, M.D., Oklahoma City, is studying the effect of Donnatal in functional colonic disease in his private practice under a grant from A. H. Robins Co., Inc.

J. N. MITCHELL, M.D., has assumed his duties as chief of staff of Memorial Hospital in Lawton.

W. F. BOHLMAN, M.D., formerly of Watonga, has moved his practice to Tulsa.

BURL E. STONE, M.D., formerly of Anadarko, has established his practice in Lawton.



Omer C. Coppedge, M.D., Bristow, (left) receives his 50 Year Pin from Past President Ralph McGill, M.D. Doctor Coppedge began practicing the summer of 1905 in Bristow and is still practicing there.



Ralph McGill, M.D., O.S.M.A. Past President, (right) presents Emory W. King, M.D., Bristow, with a 50 Year Pin. Doctor King, who started practicing in Bristow in December, 1905, reports he is still "going strong."

FRANK NELSON, M.D., Tulsa, discussed the history of medicine at a meeting of the Tulsa Green T Club recently.

H. R. BENDER, M.D., graduate of the University of Oklahoma School of Medicine who has been practicing in Wichita Falls, Texas, has opened his office in Lawton.

H. A. SCOTT, M.D., is the new president of the medical staff of Oklahoma Baptist Hospital, Muskogee.

W. F. LEWIS, M.D., Lawton, is the newly elected president of the Lawton Council of Camp Fire Girls, Inc.

ROY W. ANDERSON, M.D., Cordell, is spending three months in postgraduate study at the University of Vienna, Austria.

MALCOM E. PHELPS, M.D., El Reno, presented a paper at the Southern Medical Association meeting in Houston in November on sodium pentothal as an anesthetic.

RALPH E. MEINHARDT, M.D., 1951 graduate of the University of Oklahoma School of Medicine, has opened his office in Yale.



New Booklet Presents Latest Facts on Feeding the Sick



Adequate nutrition during illness and convalescence is essential for recovery whether the patient is managed in the hospital or at home. In the latter case, physicians often must devote much time to instructing those responsible for caring for the sick in good nutritional practices.

"Meal Planning for the Sick and Convalescent" has been designed to relieve you of the need for repeating over and over again essential dietary facts. This new Knox booklet presents in layman's language the latest nutritional applications of proteins, vitamins and minerals, gives practical hints on serving food to adults and children, suggests ways to stimulate appetite and describes diets from clear liquid to full convalescent. Best of all it offers the homemaker for the first time detailed daily suggested menus for each type of diet, plus 14 pages of tested nourishing recipes.

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YOUR NAME AND ADDRESS



PRESIDENT'S LETTER

Perhaps many of you are wondering what has resulted from the action of the House of Delegates in Tulsa, May, 1955, when the House voted unanimously to build an office for headquarters of the Oklahoma State Medical Association. To finance this building, a special assessment of thirty-five dollars was voted by the House.

There have been many delays in securing and zoning a building site. Both problems have been solved. The building site has been selected. It is located on the Northwest By-pass where Shartel Street crosses the by-pass, about a block west of the Santa Fe railroad underpass. The zoning, much delayed for one cause or another, has been accomplished only recently.

The Building Committee has met on several occasions for deciding such problems as selecting an architect, studying styles of architecture appropriate for such an edifice, the floor plans and many other items incident to such an important structure. The plans you see in this issue of the *Journal* are the ones favored by the Committee. The Committee has done a time consuming job and hopes that every doctor in the state will be pleased with its results and the finished product.

Of course, to accomplish the final product, there is a little matter of financing that is conventionally accepted as a matter of course but building-wise, a necessity for progress. Speaking of assessment, allow me to congratulate the membership of two counties—Washington and Nowata (33 members) for having paid 100 per cent of the assessment. This is most commendable, and thanks to the members of Washington-Nowata Counties.

By the time the next *Journal* is published, we should be very glad to report your individual counties in the list with Washington-Nowata Counties. Rapid progress can be made if you take care of this now.

R. L. Goodwin

President



Executive Offices

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Academy of General Practice Issues Invitation To Meeting

All members of the Oklahoma State Medical Association are invited to attend the annual meeting of the Oklahoma Academy of General Practice to be held February 6-7, 1956 at the Tulsa Hotel in Tulsa. There is no registration fee.

Six outstanding guest speakers have been secured for the program. They are: E. L. Compere, M.D. (orthopedics); Edward H. Hashinger, M.D. (internal medicine); James L. Dennis, M.D. (pediatrics); L. H. McDaniels, M.D., (general practice); Newton D. Smith, M.D. (proctology); and Wm. F. Guerriero, M.D. (obstetrics-gynecology). Doctor McDaniels will also be the after dinner speaker at the annual dinner which will be held Monday night, February 6.

A complimentary breakfast will be held Tuesday morning, February 7 for the physicians and their wives. A luncheon and style show is also planned for the wives of the doctors who attend the meeting.

Earl M. Lusk, M.D., Tulsa, is president of the Oklahoma Academy of General Practice and Mark Holcomb, M.D., Enid, is President-Elect and will take office at the inaugural dinner during the meeting. V. M. Rutherford, M.D., Midwest City, is secretary-treasurer.

ANNOUNCEMENTS

Oklahoma Academy of Generol Proctice

February 6-7, 1956, Tulsa Hotel, Tulsa, Oklahoma.

University of Colorado School of Medicine

General Practice Review. January 16-21, 1956. Denver, Colo.

Hawaii Medical Association

Centennial April 22-29, 1956, following the American College of Physician's session in Los Angeles. For further information, write the Hawaii Medical Association, 510 South Beretania St., Honolulu 13, Hawaii.

American Academy of General Practice

Eighth scientific assembly March 19-22, 1956, Washington, D. C.

Institute in Psychiotry and Neurology

Veterans Administration Hospital, North Little Rock, Ark. March 1 and 2, 1956.

American Academy of Allergy

Twelfth annual meeting, February 6-8, 1956, Chase Hotel, St. Louis, Mo.

American College of Radiology

February 10, 1956, Drake Hotel, Chicago, Ill.

Oklahoma State Medicol Association

Annual Meeting, May 6-7-8-9, 1956, Municipal Auditorium, Oklahoma City, Okla.

Bondurant Named Chairman of Public Welfare Group

Charles P. Bondurant, M.D., Oklahoma City, has been elected a member of the Board of Directors and Chairman of the National Council of State and Local Board Members of the American Public Welfare Association.

The Association, composed of representatives of 53 states and territories, held the election at its biennial round table conference held in Washington, D. C. November 30-December 3.

Doctor Bondurant succeeds Dr. Harry E. Robbins, Denver, Colo. as chairman. The Council of which Doctor Bondurant is chairman is a very important part of the policy making group which studies and recommends needed legislation on welfare problems, service and standards to the National and State Governments. He has been chairman of the Oklahoma Public Welfare Commission since his appointment to the Commission on November 5, 1951.

Doctor Bondurant, an Oklahoma City dermatologist, was graduated from the University of Oklahoma School of Medicine in 1924. He interned at Indianapolis City Hospital and served a residency at New York Skin and Cancer Hospital. He was certified by the American Board of Dermatology and Syphilology in 1938. Professor of Dermatology at the University of Oklahoma School of Medicine, he is a member of the American Academy of Dermatology and Syphilology and the American College of Physicians.

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Deaths

Felix M. Adams, M.D.
1884-1955

Felix M. Adams, M.D., medical superintendent of Eastern State Hospital at Vinita since it opened in January, 1913, died December 3. He had been ill with a heart ailment for two months.

Doctor Adams, the oldest mental hospital superintendent in the nation in point of continuous service, was inducted into the Oklahoma Hall of Fame in 1954.

Doctor Adams was born January 30, 1884 in Celeste, Texas. He attended Baylor University and received his medical degree from Barnes School of Medicine, St. Louis.

He was a member of the official board of the First Methodist Church, a 32nd degree Mason and a member of the Akdar Shrine, past president of the Vinita Rotary Club, treasurer and director of the Phoenix Federal Savings and Loan Association and a member of the Vinita Chamber of Commerce.

He was secretary of the Ottawa-Craig County Medical Society, the American Psychiatric Association, Southern Medical, Oklahoma and Southwestern Neurological Associations.

Survivors include the widow of the home address, two sons, Felix Adams, Jr., M.D. and John Adams, and a daughter, Mrs. Phil Salkeld, wife of a Quanah, Texas, physician. Three brothers, four sisters and five grandchildren also survive.

Henry A. Howell, M.D.
1874-1955

Henry A. Howell, M.D., pioneer Holdenville physician died at Veterans Hospital at Sulphur November 25.

Doctor Howell was born July 8, 1874 at Dover, Ark. and graduated from Emory University, Atlanta, Georgia. He retired from active practice about a year ago. He served in the medical corps in World War I. Doctor Howell was a member of the Methodist Church, the Masonic Lodge and the American Legion. He was a member of the Rotary Club for many years.

Samuel B. Leslie, M.D.
1874-1955

Samuel B. Leslie, M.D., Okmulgee, died November 11, 1955, from a coronary occlusion.

Doctor Leslie was born April 6, 1874, at Leslie, Arkansas. As a young man he taught school in Arkansas and later rode horseback throughout this part of old Indian Territory selling fruit trees. He attended Denver Medical College, graduating in 1902. He worked his way through medical school delivering newspapers. In 1902 he came to Okmulgee, Oklahoma, where he practiced medicine until his death, a period of 53 years.

Doctor Leslie was very active in civic and medical work. He was a member and president of the Okmulgee Board of Education from 1910 to 1931. He served on the Board of Stewards and the Board of Trustees of the First Methodist Church in Okmulgee for many years. He also served as a teacher and superintendent in the Sunday School. He was a Mason.

Doctor Leslie was a charter member of the Okmulgee County Medical Society and served several times as president. He served on the Oklahoma Board of Medical Examiners for eight years and was a Life Member of the Oklahoma State Medical Association. In 1952 he received a 50 Year Pin.

His wife survives and one son, Samuel B. Leslie, Jr., M.D., three daughters, Mrs. Harold Hunsaker, Mrs. Glenn Echoles and Mrs. Bishop Shields.

Albert Cicero Peacock, M. D.
1867-1955

Albert Cicero Peacock, M.D., retired pioneer physician, died at a Tulsa convalescent home November 28 after a 10 month illness.

Doctor Peacock, who was 88, practiced in Tulsa from 1908 until he retired in 1934. He was born in Lexington, N. C. and was graduated from Sewanee of the South school of medicine.

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*Schaefer, F. H.: Ohio State M. J. 51:347 (April) 1955.



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PHYSICIAN PLACEMENT

The following physicians have expressed a desire to locate in Oklahoma. To the best of our knowledge, the names, addresses, qualifications and availability are current and accurate.

The asterisk beside some names indicates that additional information concerning the physician is available in this office.

Dermatology

Leonard D. Grayson, 1301 Cornaga Ave., Far Rockaway 91, N.Y. Age 34, medical school unknown (Grade A), Board Eligible in Dermatology, available immediately.

General Practice

*Ake Akerberg, Multragatan 20, Stockholm, NGBY, Sweden, age 38, University of Helsinki, Finland, available January, 1956.

*Charles Dail Davenport, 814 N. Elm, Hoisington, Kansas, age 30, University of Oklahoma School of Medicine, 1953, veteran, available July, 1956.

*John V. Hume, 931 W. 15, Pueblo, Colo., age 31, University of Colorado 1953, residency in general practice, veteran, availability unknown.

Elmer D. Peffly, Capt., USAF (MC), Aviation Medical Examiner, 3545th USAF Hospital, Office of the Flight Surgeon, Goodfellow Air Force Base, Texas, age unknown, University of Oklahoma School of Medicine, 1953, interned at Wesley Hospital, Oklahoma City, available June, 1956.

*Harvey Lewis Paul Resnik, Philadelphia, Pa., Philadelphia General Hospital, age 25, College of Physicians and Surgeons, Columbia University, 1955, available July 1, 1956.

Internal Medicine

*Marvin J. Colbert, Apt. 110, 809 S. Marshfield Ave., Chicago 12, Ill., age 31, University of Boston 1949, two and one-half years residency in internal medicine, veteran, available August 1, 1955.

*Robert Henry Frankenfeld, U. S. Naval Hospital, Quantico, Va., age 31, Cornell University 1947, Board eligible in Internal Medicine, active military duty, available October 1, 1955.

*William Prothro Jolly, 803 Fifth St., Rural Route No. 1, Iowa City, Iowa, age 32, University of Michigan, 1949, residency in internal medicine, veteran, available July 1, 1956.

*C. A. Loughridge, 1107 E. Upsal St., Philadelphia 19, Pa., age 36, College of Physicians and Surgeons Columbia University 1954, in internal medicine residency at Philadelphia General Hospital, available between July and September, 1956.

*Alfred M. Steinman, 515 Ocean Ave., Brooklyn 26, N. Y., age 32, Long Island College of Medicine 1949, residency in Internal Medicine and Cardiology, veteran, available immediately.

Orthopedics

*Andrew G. Hudacek, Kosair Crippled Children Hospital, Louisville 17, Kentucky, age 31, Georgetown University 1948, Board eligible in Orthopedics, veteran, available October 1, 1955.

Robert E. Landstra, American Legion Hospital for Crippled Children, 2350 Lakeview Ave., St. Petersburg, Florida, age unknown, now in orthopedic residency training, availability unknown.

Pathology

*James Kendall Boyd, 1745 S. St. Louis Ave., Tulsa, Okla., age 39, University of Tennessee 1942, Board eligible in Pathology, veteran, available immediately.

*William McIntosh Hindman, Receiving Hospital, Detroit, Michigan, age 38, University of Tennessee, 1945, four year pathology residency, Detroit Receiving Hospital, Board eligible, available July, 1956.

Pediatrics

*Arthur T. Hall, 314 Allison St., Sayre, Pa., age 33, University of Rochester 1952, two year residency in Pediatrics, veteran, available July 1, 1955.

*Leslie W. Langley, Jr., 1709 De Pauw Ave., New Albany, Ind., age 32, University of Louisville School of Medicine, 1953, now taking second year of pediatric residency, veteran, available July 1, 1956.

*Ralph Lee Perry, 10812 Mt. Carmel Rd., Cleveland 4, Ohio, age 32, Western Reserve University, 1953, two years, appr. pediatric training, veteran, available July 1, 1956.

Surgery

Alice F. Gambill, 1605 Clover Lane, Fort Worth, Texas, University of Oklahoma 1949, one year residency in General Surgery, available immediately.

*William A. Holbrook, Jr., University Hospital, Baltimore, Maryland, age 34, University of Maryland 1945, Board qualified in General Surgery, veteran, available August, 1955.

*C. Richard Jernigan, Parkland Memorial Hospital, Dallas, Texas, age 29, Southwestern Medical College 1948, will be Board qualified in General Surgery January 1, 1956, veteran, available January 1, 1956.

Urology

Woodrow Payne, M.D., 764 McConnell, Memphis, Tenn., age 34, University of Tennessee, 1944. Board Qualified in Urology, veteran, available July, 1956. (Wants city 20,000-75,000 — private proup, partnership).

*David M. Stahl, 2624 W. 75th Pl., Kansas City 13, Missouri, age 28. Baylor College of Medicine 1952, in residency in urology, veteran, available July 1, 1956.

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Report on Actions of the House of Delegates, American Medical Association 9th Clinical Meeting

Social security, the report of the Committee on Medical Practices, grievance committees and revisions of the code of medical ethics were among the major subjects of discussion and action by the House of Delegates at the American Medical Association's Ninth Clinical Meeting held Nov. 29-Dec. 2 in Boston.

Named as the 1955 General Practitioner of the Year was Dr. E. Roger Samuel of Mount Carmel, Pa., whose selection by a special committee of the Board of Trustees was announced at the opening session on Tuesday. Doctor Samuel, a former member of the House of Delegates and a general practitioner for 35 years, received the medal and citation presented annually for community service by a family doctor.

Total registration at the end of the third day of the meeting had reached 7,027, including 3,672 physicians.

Social Security

Major legislative policy action taken at the Boston meeting involved H.R. 7225, known as the Social Security Amendments of 1955. This bill, which was passed last summer by the U.S. House of Representatives and is now pending before the Senate Finance Committee, includes a proposal for federal cash benefits to selected individuals judged to be permanently and totally disabled. The House of Delegates adopted a substitute resolution proposed by the Reference Committee on Legislation and Public Relations to combine the intent of four resolutions and three supplementary reports of the Board of Trustees dealing with H.R. 7225 and other aspects of Social Security. The substitute resolution stated the following policy:

"That the American Medical Association reiterate in the strongest possible terms its determination to resist any encroachment upon the American system of medical practice which would be detrimental to our patients, the American people;

"That the American Medical Association urge and support the creation of a well-qualified commission, either governmental or private or both, to make a thorough, objective and impartial study of the economic, social and political impact of Social Security, both medical and otherwise, and that the facts developed by such a study should be the sole basis for objective non-political improvements to the Social Security Act, for the benefit of all of the American people;

"That the American Medical Association pledges its wholehearted cooperation in such a study of Social Security in the United States, and will devote its best efforts to procuring and providing full information on the medical aspects of disability, rehabilitation and medical care of the disabled, and

"That copies of this resolution be transmitted to the President of the United States, to all members of the Cabinet, to all members of the Congress, and to all constituent state medical associations."

Report on Medical Practices

The House passed a substitute resolution offered by the Reference Committee on Insurance and Medical Service to implement the findings and recommendations of the Committee on Medical Practices (Truman Committee), which studied the basic causes leading to certain unethical practices and unfavorable publicity.

The House also approved a supplementary report of the Board of Trustees which included the following suggestions:

1. All non-surgical groups should be asked for their suggestions and cooperation in carrying out a public education program on the value of diagnostic and medical work.
2. The various specialty boards should be encouraged to reappraise the practice restrictions on their board diplomates.
3. The American Medical Association should continue to discourage arbitrary restrictions by hospitals against general practitioners.
4. Organized medicine is "ready, willing and able to solve satisfactorily its own problems, and such assurance should be given to the American Hospital Association or any other group concerning itself with such problems."

THE OKLAHOMA STATE MEDICAL ASSOCIATION INSURANCE TRUST offers each physician, under age 65, group life, accidental death, dismemberment and loss of sight insurance. This valuable program is available at low group rates as shown in the following example:

Age	*Life Insurance*	*Annual Cost*	*Accidental Death Insurance*	*Annual Cost*	*Total Annual Cost*
30	$10,000	$ 38.60	$10,000	$12	$ 50.60
40	10,000	67.00	10,000	12	79.00
50	10,000	133.50	10,000	12	145.50
60	7,500	216.15	7,500	9	225.15

A letter announcing the availability of this program has been mailed to each physician. The group life rates were included in the letter but inadvertently the accidental death rates were not included. This additional coverage cost is only $12 annually up to age 60 or $9 annually from age 60 thru age 64.

Additional details of this program are available from the offices of your State Association or the Trust at 1240 First National Building, Oklahoma City. You are urged to apply before February 15.

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WE SERVE

Guides for Grievance Committees

The House approved the report of the Committee to Recommend Guides for Grievance or Mediation Committees and commended the committee for "their superb approach to this problem." Purpose of the guides is "to promote general uniformity of organization and function of grievance committees—and better understanding of their purposes—without interfering with the inherent autonomy of constituent medical associations. Constituent associations are therefore urged to implement these guides without delay."

Medical Ethics

A proposed revision of the "Principles of Medical Ethics and Precepts of Manners of the American Medical Association" was submitted to the House by the Council on Constitution and Bylaws. The following reference committee suggestion was adopted by the House:

"In discussion it became evident that there was need for wide distribution of these principles and careful study of the proposed changes not only by this Reference Committee but also by all members of the House and in fact all members of the Association. It seemed desirable also that the two Councils (Council on Constitution and Bylaws and the Judicial Council) should meet in joint session to consider these proposals. Your Reference Committee therefore recommends that these proposals be tabled for further consideration at the next annual session of the House to be held in Chicago in June, 1956.

"In the meantime, it is recommended that these proposals in their entirety be widely publicized and that consideration be given to publishing, in the *Journal* of the American Medical Association and also in state medical journals, these proposed changes in the Principles. It is also recommended that consideration be given to the mailing of copies to each member of the Association. Finally, your Reference Committee recommends that prior to the meeting in Chicago next June the Council on Constitution and Bylaws and the Judicial Council meet in joint session to consider these proposed changes."

In another action on revisions of medical ethics, the House also approved a plan requiring that all resolutions dealing with changes in the Principles of Medical Ethics shall be considered over a period between sessions of the House before final adoption.

Miscellaneous Actions

Among many other actions on a variety of other subjects, the House of Delegates also:

Recommended that the Board of Trustees give consideration to a dues increase for all Association members, with the increase designated for contribution to the American Medical Education Foundation;

Adopted a resolution on the practice of pathology declaring opposition to "the division of any branch of medical practice into so-called technical and professional services";

Recommended that further purchase and distribution of Salk polio vaccine be carried on by the presently available commercial avenues used for other immunizing agents, and that all vaccines, once proven, should enter the usual channels of distribution;

Approved appointment of an A.M.A. committee to study the prevention of highway accidents;

Commended the Women's Auxiliary of the A.M.A. for its financial contributions in support of medical education and requested the Auxiliary to continue its active efforts;

Commended the Sears Roebuck Foundation for its thoughtfulness and foresight in sponsoring the new plan for financial assistance in establishing medical practice units;

Received progress reports from the Commission on Medical Care Plans and from the A.M.A. Law Department on its studies of professional liability;

Approved a Board of Trustees recommendation that the State Journal Advertising Bureau be separated from the American Medical Association and be given full autonomy;

Congratulated the physicians of Iowa for their efforts in supporting the position that the practice of medicine is the right of the individual, and

Approved the selection of Minneapolis for the 1958 Clinical Meeting and Chicago for the 1960 Annual Meeting.

Editorials

Rabies Vaccine

While the circumstances involved in animal bites are never the same, some guides for the physician are essential if the giving of vaccine unnecessarily is to be avoided. The expert committee on rabies of the World Health Organization states that the wound should be thoroughly cleaned with soap and water or a detergent solution and gives the indications in tabular form below:

TABLE I. INDICATIONS FOR VACCINE TREATMENT

Nature of exposure	Condition of biting animal		Decision as to vaccine treatment at time of possible exposure
	At time of exposure	During observation period of 10 days	
I. No lesions; indirect contact only	healthy or rabid	healthy or rabid	none
II. Licks (1) unabraded skin	healthy or rabid	healthy or rabid	none
(2) abraded skin or mucosa	(a) healthy	healthy	none
	(b) healthy	clinically suspicious or proven rabid	start treatment at appearance of first suspicious signs
	(c) suspicious	healthy	start treatment immediately; stop treatment if animal remains normal for 3 days
	(d) animal rabid, escaped, killed or unknown		start treatment immediately
III. Bites	(a) healthy	healthy	no treatment, except if bites are multiple, on face, neck or head bites; then treat as III (c)
	(b) healthy	clinically suspicious or proven rabid	start treatment at appearance of first suspicious signs
	(c) suspicious	healthy	start treatment immediately; stop treatment if animal remains normal for 3 days
	(d) animal rabid, escaped, killed or unknown; or any bites by jackel, wolf, fox or other wild animal		start treatment immediately

NOTE: Bites on the head, neck, and shoulders, deep multiple wounds, and those inflicted by wild animals involve a greater degree of risk, and patients should be treated accordingly.

Fairly often a situation arises in which a person previously exposed to infection and treated with vaccine is re-exposed to infection with rabies. The question as to whether treatment should be re-instituted and, if so, on what basis, must be answered. It is recommended that, if this situation arises within three months of the first course of vaccine, no further treatment is necessary unless the second exposure is of a severe type. If the interval is between three and six months, two reinforcing doses of vaccine, one week apart, are indicated, whereas if more than a six-months' interval has elapsed the treatment should be on the same basis as if it were an original exposure.

Occasionally, marked allergy to rabies vaccine manifested by angio-neurotic edema, fever adenopathy, shock, etc., is encountered. This may be during the course of immunization or, more often, following the administration of the first dose to a person who has previously received rabies vaccine. It is suggested that this difficulty may be circumvented by a change to vaccine made from the brain tissue of another species of animal (i.e. from rabbit-brain vaccine to sheep-brain vaccine).

Since this committee report was published, hyperimmune antiserum (Lederle) has had sufficient clinical trial to warrant its use. Its use is advised in multiple or severe face or hand bites by animals known to be or strongly suspected of being rabid. There should be no delay in giving the serum and vaccine should be started as soon as possible after the serum has been given.

Sampling

Statistics is not only an easy word to twist the tongue, but an easy way to twist the truth. When a physician begins quoting a group of figures as statistics nearly all of us groan, yawn or throw up our hands in boredom or uselessness. However, we all practice by statistical results of someone's work. If surgery has proved the best way to treat acute appendicitis by years of statistical figures, then we treat acute appendicitis by surgery. In our literature today, every article quotes statistics, but how do we know these statistics mean anything. As Thomas Payne wrote over 100 years ago, "There are three kinds of lies—white lies, damn lies and statistics." Many of the reports in medical literature have not been checked by statistical means and therefore, the conclusions drawn have not been proved to be valid; in fact, they may falsify the picture by the author's opinion not based on facts. Familiarity with medical statistics leads inevitably to the conclusion that common sense is not enough.

In setting up a problem, the idea is to arrange the groups to be compared in such a way that they are equal in all relevant respects. A physician makes a flat-footed statement that in his experience cancer of the lung is more common in women than in men. That his conclusion is biased and not valid is obvious when he is forced to add that 80 per cent of his patients are women. Valid conclusions can only be drawn if the cases to be compared are like in sex, age, economic status, prior state of health and have unequal qualities that cannot be taken into account neutralized by treating alternate patients by the method which is being investigated.

The reason for this alternate sample of cases is because no conscious or unconscious bias can enter in, as it may in any selection of cases, and because in the long run we can fairly rely upon this random allotment of the patients to equalize in the two groups the distribution of other characteristics that may be important. It may be desirable to break this down further so that the first male be treated, second male untreated, first female untreated and the second female treated. Age should be equalized by sexes also.

Another mistake is the false average. There are two kinds of averages, mean and median. The mean is obtained by adding all the figures together and dividing by the number of cases; this is the average as we commonly use the term. The median is the line above which 50 per cent of the cases lie and below which 50 per cent lie. For example: 200 sets of twins were delivered of mothers in ages 16 to 40. The average age was 30 years by the mean. But by using the median there were 50 per cent of the mothers below the age of 27. In this case the average was 27 years. Most medical writers fail to designate which average was used. Usually the median is more revealing.

Another question to ask each article is "How Many Cases?". Too many articles have "little figures absent" but have a report of excellent results. Every time one of Grandma's six children had a baby it happened on the change of the moon. Grandma can emphatically state that most babies are born on the change of the moon, but she doesn't give the number of cases. That is why we have a big flourish for a certain drug—it was reported to be effective in 96 per cent of the cases treated (six cases) and we have a panacea until a large series debunks the claim.

A drug advertisement for a wonderful new concept of an old drug asserted this drug to be tremendously more effective with less toxicity than the old drug. One reference was given and this a "Personal communication—not in publication as yet." Thus we don't know the basis for such statement nor what way it was better on how many patients.

Recently an article quoted follow-up studies of eclamptic toxemias of 135,973 deliveries. The incidence was 0.22 per cent of which on further division 50 per cent had later pregnancies. Of these, 30 per cent had eclampsia. Now if you can figure out the number of repeat toxemias of pregnancy you may have found the "hidden numbers."

There are many reports of the increase incidence of some diseases over the last few years but many of these can be traced, not to a rise in incidence, but to more accurate diagnosis. A coroner signed a death certificate

(Continued on Page 64)

The Characteristics and Uses of LENTE INSULIN

KELLY M. WEST, M.D.

Lente insulin has recently become available on the American market; and since experience with this preparation in this country has been rather limited, this article will briefly explain its characteristics.

Chemical Nature

Hallas-Moller and associates took advantage of the long ignored fact that placing insulin and zinc together in a certain manner will create an insulin complex with prolonged activity *if* the buffer (phosphate) which has been used habitually is omitted and replaced by acetate.

They found that bringing the zinc-insulin mixture rapidly upward toward neutrality produces amorphous material with a duration of action of about 12 hours. If, on the other hand, the pH is adjusted carefully to reach a range of 4.8 to 5.7 zinc-insulin crystals are formed which release insulin very slowly from a subcutaneous depot. The shorter acting material has been named semi-lente. The longer acting material, which has a duration of action similar to that of protamine zinc insulin, is called ultra-lente. If these insulins are mixed together in a ratio of 7 ultra-lente to 3 semi-lente, a stable product of cloudy appearance results. It is lente insulin, which has the time-activity characteristics of an intermediate insulin such as NPH or globin. Contrary to previous practices, prolongation of action is accomplished without adding a protein substance such as globin, protamine, or histone. The zinc content of lente insulin is equal to that of protamine zinc insulin (.2-.25mg. per 100 units insulin.)

THE AUTHOR

Kelly M. West, M.D., Oklahoma City, who wrote "The Characteristics and Uses of Lente Insulin," graduated from the University of Oklahoma in 1948. He interned at St. Luke's Hospital and served residencies at New England Deaconess Hospital, and St. Anthony Hospital.

Time-Activity Characteristics

Lente insulin has some demonstrable effects in lowering blood sugar within two hours. It reaches a peak of activity in 12 to 16 hours; and although there is slight suppression of blood sugar as long as 30 hours after injection, the activity dissipates rapidly after 24 to 28 hours. This time-action then, gives an ideal overlap effect, the appearance of insulin activity one to two hours after injection coinciding with the declining effect of the injection of the previous day. The relatively substantial activity during the period seven to 18 hours after injection controls very well the hyperglycemic effects of lunch and supper.

Comparison With Other Insulins

Lente insulin is very similar in action to NPH, globin, and mixtures of two parts regular or crystalline insulin to one part protamine zinc insulin. Several investigators have noted the almost identical time-activity characteristics of lente and NPH insulin.

Clinical testing in 40 patients was carried out during 1954 at the Veterans Administration Clinic and on certain private patients with the purpose of comparing NPH and lente insulin and the results were as follows. It was difficult or impossible in most in-

stances to detect any difference in the action of lente and NPH insulin. One insulin can usually be substituted for the other without changing the dose. NPH and lente were given on alternate days to several patients for many days without any detectable day to day fluctuation of results of urine sugar tests. In two patients there seemed to be evidence of consistently lower fasting blood sugar levels on lente insulin. In one patient this represented a relative disadvantage to the lente program since he preferred to stay on NPH rather than to increase the bedtime feeding. In the other patient this phenomenon did not affect the choice of an insulin since changes in meal planning entirely acceptable to the patient made it possible to accomplish satisfactory control with either insulin. This tendency for lente insulin to last slightly longer in five to 15 per cent of patients has been noted by others, including the investigative department of Eli Lilly Company, and has not been explained.

I have made no direct comparisons of lente and globin insulin: but since lente is so similar to NPH, it would be reasonable to assume that globin and lente are similar, with lente probably slightly longer in activity.

Lente Mixtures

Some patients taking NPH insulin desire a rather substantial breakfast but cannot avoid excessive postbreakfast hyperglycemia under these circumstances unless some rapidly acting insulin is added to the basic dose of intermediate insulin. NPH and unmodified (regular) or crystalline insulin when mixed together maintain their separate pharmacologic characteristics and thus enable the patient conveniently to place the two in the same syringe in a percentage distribution fitting his requirements. When facing this problem on a program of lente, one can place lente and crystalline insulin in the same syringe; and although there exists the theoretical possibility of changing the nature of one or both of the insulins by doing so it has been found that these two insulins when placed in the same syringe maintain to a great extent their separate characteristics of activity and thus produce the desired additive effect. My experience based on a small number of cases suggests that regular (unmodified) insulin may be used similarly.

It should be mentioned that the practice of placing a small amount of rapidly acting insulin in the same syringe with an intermediate insulin does not constitute "mixture" in the usual sense of the term since the possible area of interaction is small. To what degree lente and the rapidly acting insulins would maintain their separate charcateristics of activity if actually mixed thoroughly for long periods in various ratios remains to be seen. This point has not been investigated in Scandinavia (where the widest use of lente insulin has occurred) because the practice there is to achieve additional rapid activity when required merely by increasing the proportion of semi-lente in the lente mixture; if more activity of a prolonged nature is required, ultra-lente is added. Since neither semi-lente nor ultra-lente is now generally available in America, the convenient tailoring of insulin programs with these two zinc insulins is not possible here at this time.

Advantages of Lente Insulin

Although the discovery that insulin activity can be prolonged without adding additional protein material is of great interest, and although lente insulin is probably as satisfactory for general use as any other insulin, it has few merits not already offered by the earlier commercial insulins. Its action, as mentioned earlier is almost identical to that of NPH insulin. At present it is no cheaper than other insulin preparations, nor is it likely to be appreciably less expensive in the future. Local and generalized allergic reactions to insulin products are rarely a major problem, nor is there any proof as yet that using a product free of protamine will substantially reduce their number.

Some of the studies attempting to compare lente with NPH have not been done in such a way as to yield data suitable for objective interpretation. The socalled double-blind technique might be effectively used here in checking patients who "cannot be controlled" on one insulin and "can be controlled" on another insulin of very similar time-action. I have not used this technique because I have not had the experience of finding either NPH or lente particularly preferable in any but the one case previously mentioned. In that instance the explanation lay not in the fact

that lente was "smoother" or in any way was qualitatively better but that in this patient lente seemed to act a bit longer.

There will probably be some suggestions that the number of insulins marketed be limited in order to minimize confusion. Although this idea deserves some consideration, it would almost surely be impossible to obtain agreement on which insulin or insulins should be withdrawn from the market. Surely, lente insulin and its constituents, semilente and ultra-lente, are products which have enough merit to be made available commercially in America. I now use lente and NPH with about equal frequency in starting new patients on insulin treatment and have no particular preference for one or the other. The insulin adjustment with lente insulin is carried out under the techniques previously described for NPH.[3] There would, of course, be no reason for changing patients under satisfactory control from globin or from protamine zinc insulin to lente insulin.

Summary

Lente insulin is a zinc-insulin complex containing no added protein material. It has characteristics of activity closely similar to those of NPH insulin. Most diabetic patients can be controlled on a program of single daily injections of lente alone although it is appropriate in some instances to add some rapidly acting insulin in the same syringe.

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A Doctor Comments on

MATERNAL MORTALITY REPORT

JOHN W. SHACKELFORD, M.D., M.P.H.

THE AUTHORS

John W. Shackelford, M.D., Director of Maternal and Child Health of the Oklahoma State Department of Health, was graduated from Tulane University and also holds a master's degree in Public Health from Harvard University.

The Special Committee of the State Medical Association for the Study and Prevention of Maternal Mortality has presented the following case report, along with the comment of the reporting attendant after he had received the summary of the Committee's comments. The Committee believes that this presents several points which are of interest and importance in obstetrical care. The Committee also present a portion of the letter written by the doctor in response to the summary because it appreciates the spirit in which the doctor received this report and thinks that it may encourage more complete reporting of maternal deaths in the future.

In the study of these cases neither the attendant's name nor the patient's name is known to the Committee, in order that analysis of the case can be made without any personal bias.

Following is a summary of the case and the comments of the Committee essentially in the form sent to the doctor:

Cause of Death:

I (a) Hemorrhage from Placenta Previa

(b) Pregnancy

II Hemorrhagic tendency.

Summary of Case and Physical Findings

This patient was a white female of 35 years and of high parity. The past obstetrical history indicates no complications with previous pregnancies and deliveries except for postpartum bleeding requiring packing of the uterus in the two deliveries immediately preceding the present pregnancy. The patient had been advised by her physician to have no more pregnancies after the last delivery.

The patient was seen first by her physician in the seventh month of the present pregnancy, at which time the blood pressure was recorded at 160/90, the heart and lungs were normal, the weight was 138 pounds, and a urinalysis was negative for albumin. A blood count and blood Wasserman were not done. The patient is reported to have been cooperative except that she failed to report for prenatal care early in pregnancy as she had been advised to do. In addition to the elevated blood pressure noted above, it is reported that the patient had deeply pigmented brown skin, mild anemia, lack of vitality, and headaches.

The first reported sign of serious complication of this pregnancy appeared in the eighth month when vaginal bleeding occurred. At this time the patient was sent to the hospital on bed rest, sedation with phenobarbital, and was given "Des" 25 mg. every four hours. Although it is not stated definitely, it seems that the vaginal bleeding was not corrected, and that further measures were considered necessary to control the blood loss. It was estimated that the patient lost about one and one-half pints of blood prior to delivery. It is assumed by the Committee that labor of some sort was in progress at this point, but the physician failed to give any details concerning the labor except to state that it was not induced and not prolonged. Two vaginal examinations were done prior to delivery. The first examination was done 24 hours before delivery, and the findings are not given in the protocol. The second was done 30 minutes before delivery and presumably was done at the same time as the manipulative procedures to be described. It is stated that sterile precautions were used for these examinations, but that the perineum was not shaved. Judging from the information supplied, it seems that at this point the patient was delivered quite rapidly by podalic version and extraction. This operative procedure consumed 30 minutes, and it is described by the attending physician as not difficult and that the cervix was dilated easily manually. A living infant was delivered. It is stated that the patient was in serious condition immediately after delivery, and also that about half of the placenta was detached, which the physician states was the source of the ante-partum bleeding. From this description of the findings, the Committee assumes that the physician was in all probability dealing with a major degree of placenta previa. The placenta was delivered immediately after the baby by slight cord traction, and is reported to have been complete. An internal examination was made for lacerations and none were found. The patient was given oxytocics and the uterus was packed with gauze three times following delivery, but she continued to bleed vaginally in spite of these measures. It is stated that the uterus did not contract well following delivery, and that the packs were forced out of the vagina by contractions of the abdominal muscles and straining. Intravenous glucose solution was used, and the patient received four pints of blood during her post-partum course. No information is given concerning the degree of shock encountered, and the response of the patient to the blood transfusions. Consultation with another physician was obtained at this point, and the consultant was asked for his comments but failed to reply. The treatment described was of no avail, the bleeding continued, and the patient is reported to have expired 24 hours after delivery, 48 hours after hospital admission, and 72 hours after vaginal bleeding was first noted. Death was ascribed by the reporting physician to hemorrhage from placenta previa, a hemorrhagic tendency, and possible adrenal insufficiency. An autopsy was not done.

Summary of Comments by the Special Committee

The Committee thinks that in the treatment of placenta previa of major proportions and with excessive bleeding that imme-

diate and adequate blood replacement should be the first and most important procedure. Also, it should be stressed that blood replacement definitely should precede any rectal or vaginal examination used to establish the correct diagnosis and degree of placenta previa, since it is well known that either of these procedures may precipitate additional and occasionally uncontrollable bleeding. It is also of the utmost importance that any vaginal examination after blood replacement should be done in an operating room with all of the necessary equipment and personnel present and ready to proceed with Cesarean section if such is deemed necessary. It is to be noted that in the case reported here apparently none of these established precautions were taken. It appears that this patient went into deep shock immediately after delivery with continuous bleeding which the physician could not control from below. At this point, it should be emphasized again that in the opinion of the Committee, manual dilatation of the cervix with podalic version and extraction has no place in the present day treatment of placenta previa. Cervical and lower uterine segment lacerations with uncontrollable bleeding too often follow such a procedure, and this is true especially in the presence of placenta previa when the lower segment is unusually friable and vascular. The Committee thinks that such a procedure in this patient definitely was contraindicated. Even the employment of of the intra-uterine bag has essentially been discarded as a means of controlling bleeding with placenta previa, and with this opinion the Committee is in complete agreement. Therefore, the Committee is of the opinion that the treatment of major degrees of placenta previa consists of blood replacement and Cesarean section. Minor degrees of previa often can be treated successfully with artificial rupture of the membranes and, of course, blood replacement. If the latter procedure is elected in a given case and the bleeding is not controlled adequately, then Caserean section should be done without undue delay. At the time of section, bleeding points at the placental site in the lower segment can be controlled under direct vision, and if this should fail or the uterus should fail to contract properly or if other pathology exists, hysterectomy can be done quickly. Let it be emphasized again that blood replacement in adequate amounts should precede any definite diagnostic or treatment procedure in patients suspected of having placenta previa, and that additional blood must be at hand for use if needed.

The Committee is bound to agree with the reporting physician's own comment in that when the bleeding did not stop before delivery and the cervix was found to be closed, that Cesarean section was indicated in this case. From the report it seems certain that there was adequate time to accomplish blood replacement, careful diagnosis, and proper treatment in this patient. The complete inadequacy of uterine and vaginal packing is well illustrated in this report. The Committee lacks adequate information to determine the feasibility of post-partum hysterectomy in this patient, but feels that it should have been given very serious consideration after rapid blood replacement, and especially in view of the time interval of 24 hours between delivery and death. The Committee thinks that with the information given it cannot comment intelligently upon the reporting physician's impressions of hemorrhagic tendency and possible adrenal insufficiency.

The Committee agrees with the cause of death as given on the death certificate, and believes that the responsibility for this death must be assigned to the attending physician. This maternal death is considered as probably preventable by the Committee.

When the foregoing comment was received by the attendant, his reply was in part as follows:

"I do not in any way resent your report; it's a good one and in the main reflects excellent opinion. Some few things I evidently did not report accurately or at all that I should have, that might modify it, but it is an excellent report and comment. If necessary ever again, I'll cooperate just as readily, as only in this way can progress be made."

Medical Grand Rounds

ANGINA PECTORIS

Edited by WILLIAM O. SMITH, M.D.

THE AUTHOR

William O. Smith, M.D., who edited Medical Grand Rounds, is Chief Medical Resident at the University of Oklahoma Hospitals.

Stewart Wolf, M.D.: Today we are presenting a 57-year-old man from Doctor Eliel's service who presents the problem of persistent cardiac pain following a myocardial infarct several weeks ago. Doctor Katibah will tell us about the patient.

George M. Katibah, M.D.: The patient is a 57-year-old retired, white, laborer who was admitted to University Hospital on September 17, 1955 with the chief complaint of chest pain. The patient was in good health until four days prior to admission at which time he noted the sudden onset of crushing, sub-sternal pain while walking. This was accompanied by sweating and was relieved shortly by rest. That night the patient noted some shortness of breath, orthopnea and restlessness. The next day he had a similar episode while walking, again relieved by rest. Two days prior to admission sub-sternal pain again appeared while he was walking, this time radiating into the neck, jaw and both arms down to the elbows. This pain was constant, was not relieved by rest and was accompanied by dyspnea. The patient received some tablets for relief, but, because he was not relieved of pain, he was admitted to the University Hospital.

Past History: In 1953 this patient suffered burns of the head, face, hands, flank and feet and was hospitalized in Arizona for treatment and for skin grafting. In May of 1955 he was again hospitalized for tarsorrhaphy and additional grafting. His blood pressure at that time was 160/100. Over the past year he had experienced some mild exertional dyspnea, orthopnea and paroxysmal nocturnal dyspnea but no chest pain. The patient had smoked from six to eight cigarettes a day for some time, and, prior to being burned, was quite a heavy drinker.

Physical Examination: Revealed a well developed, well nourished white male in acute distress. The blood pressure was 100/80, pulse 90, respirations 20 and temperature 99.8. There were scarred areas on the head, face, hands and feet. There was deep tobacco staining on the fingers of both hands. Marked conjunctivitis, ectropion and corneal scarring of the right eye were noted. Expiratory wheezes and increased resonance were present bilaterally in the lungs. Cardiac examination was not remarkable and no other abnormal physical findings were elicited.

Laboratory: On admission the electrocardiogram revealed evidence of recent anteroseptal infarction. The blood count was 9,200 with a normal differential. The urine, BUN and electrolytes were also normal. Repeated white blood counts showed some leukocytosis during the first three weeks. No erythrocyte sedimentation rate was done.

Course: The patient was treated with strict bedrest, oxygen and anti-coagulants. He was given sedation and narcotics and a bland, low residue, low sodium, low cholesterol diet. His course was complicated. Two days following admission he developed fever of 101.2 and showed scattered, moist rales in the lung bases and tenderness in the right upper quadrant. Congestive heart failure and pneumonitis was postulated. He was digitalized and was given penicillin and became afrebrile in one week. Because of consistent blood pressure below 100 systolic norepinephrine was started on the fourth day and

maintained for 10 days. During the third week ventricular extrasystoles were noted and the patient was given quinidine for 10 days. Intermittent anginal pain has persisted throughout the six weeks of this hospitalization. This pain is not necessarily related to exertion, emotion or eating, but may come on while he is at rest in bed, and may awaken him. Nitroglycerin sub-lingually and papaverin has afforded no relief. During the first five days of hospitalization this patient required only one grain of morphine-sulfate for pain. Since that time he has required from 1/6 to one grain of morphine-sulfate daily for relief of pain.

For the total period of hospitalization, i.e. six weeks, the patient has been maintained on bed rest and has received therapeutic doses of dicumerol. We have questioned the amount of morphine which he has been given. Dr. Phillip Johnson saw the patient as a possible candidate for I 131 therapy for intractable angina. His 24-hour I 131 uptake is 24.6 per cent; the serum cholesterol is 281 mgm. per 100 ml. It was Doctor Johnson's opinion that this patient should be observed for at least another month before considering radioactive iodine as a means to lower basal metabolic rate.

Doctor Wolf: Doctor Bayley, will you open the discussion with an evaluation of this patient's chest pain as it relates to the general problem of angina. Would you also remark on the management of such patients.

Robert H. Bayley, M.D.: The differential diagnosis of chest pain must at times prove a difficult one in view of the many organs whose diseases can produce pain in the "cardiac region." Cardiac pain may extend from the eyebrow to the iliac crest or, to make the matter more difficult, it may be sharply localized in a single region such as the wrist or shoulder joint. It is seldom localized in the region of the apex beat. Much more characteristic than its localization are the four cardinal factors which precipitate heart pain. The factors are: pain associated with exertion; pain with emotional upset, such as anxiety or anger; pain after eating, usually a heavy meal; and finally, pain on exposure to cold. Pain is more apt to occur when the patient encounters several factors at once. I have been impressed with patients' certainty concerning these cardinal factors. They know almost to the step the amount of exertion required to trigger pain.

The exact initiating mechanism of heart pain is not known. The impulses travel along the afferent sympathetic nerves which commence in the walls and adventitia of the coronary arteries and follow the up-stream course of these vessels to reach the upper dorsal and lower cervical sympathetic ganglia via the cardiac plexuses. They enter the spinal cord along the upper four dorsal white rami and the dorsal roots of the spinal nerves. They probably ascend the cord through the spino-thalamic tracts. A theory postulated by Sir Thomas Lewis and his associates holds that myocardial ischemia is associated with the accumulation of a "P" or pain substance which initiates the pain impulses. Another theory holds that pressure in the walls of the coronary arteries created by abnormal contraction and/or dilatation is directly responsible for initiating the impulses. Interestingly there exists a striking dissociation between the electrocardiographic evidence of myocardial ischemia and the occurrence of heart pain. The extensive use of the direct writing electrocardiograph has shown that "silent" myocardial infarction is much more common than was previously thought. There are frequent examples of all grades of myocardial infarction from the acute episode with cardiac shock to the gradual, often symptomless, development of local or diffuse myocardial fibrosis. The extent of myocardial infarction depends not only upon the amount of coronary atherosclerosis but also the rate at which the occlusive change takes place and the occlusive change must include perverted vasomotor activity of a part, or of the whole, of the coronary artery tree. Approximately 30 per cent of myocardial infarctions are unassociated with organic obstruction which can be appropriately timed with the development of the infarct. Upwards of 50 per cent of occlusive changes in major branches of the coronary artery tree progress so gradually that the patients experience no symptoms of coronary artery disease. Recurrent heart pain or angina pectoris indicates a progressively occlusive process and serial electrocardiograms will show

progressive myocardial damage in the majority of these patients. Whether the pain is relieved with nitroglycerine alone or occasionally requires morphine is immaterial with respect to the presence or absence of associated myocardial damage. Prolonged bouts of heart pain which require morphine for relief are apt to be associated with the more acute varieties of infarction but equally typical infarctions as depicted by serial electrocardiograms are often attended by brief bouts of heart pain that respond promptly to nitroglycerine.

The therapy in this patient should follow these principles. Activities which are known to produce pain should be avoided as far as possible. Nitroglycerine should be used both for relief of pain and for its prevention. Prevention is more important than relief. Morphine, dilaudid, or demerol is indicated when prolonged pain is unrelieved by nitroglycerine. These drugs are strictly contraindicated in the chronically recurring brief bouts of heart pain. Drug addiction is a very real danger and must be avoided. A period (four weeks or more) of relaxation is usually very helpful and in this case longer and more rigid rest is indicated. The actual time must be individualized. Anticoagulant therapy has been recommended when heart pain becomes frequent, and/or severe, suggesting "impending infarction." If anticoagulant therapy is commenced, it should be continued for at least six months and should be discontinued gradually, not abruptly. I agree with its use in this case. In a few instances it may be necessary to resort to nerve or stellate block. P. D. White and others have reported success with paravertebral injection of dorsal roots D-1 through D-4. However, it has been suggested that these procedures remove the safety signal of pain.

Doctor Wolf: Experimental ligation of coronary arteries in dogs whose hearts have been surgically deafferented shows a lower mortality than in animals whose pain fibers are intact.

Doctor Bayley: Yes, the experiments to which you refer showed 75 per cent survival in the dogs with deafferented hearts and a 30 per cent survival in dogs allowed to experience pain upon coronary artery ligation.

The detection of hyperthyroidism associated with coronary artery disease is most important. It must not be overlooked when it is a component of any form of heart disease. Treatment directed at the hyperthyroid state is of striking benefit to the associated form of heart disease. We can safely exclude hyperthyroidism in the present patient and the occurrence of heart pain with infarction of one month's duration does not offer the chronic problem for which propylthiouracil or radioactive iodine might be considered in an euthyroid individual. The surgical approach to relief of myocardial ischemia is still in the experimental stage.

Doctor Wolf: Would you care to remark on the use of tobacco?

Doctor Bayley: Some patients with coronary artery disease have their heart pain aggravated by smoking. There may or may not be associated ECG changes. These patients should be urged to stop. Usually smoking in moderation does no harm. After 70 or 80 years of age, there are few enjoyments and it is hardly appropriate to rob either sex of the beloved corn-cob pipe.

Dr. P. M. McNeill: Doctor Bayley, what about alcoholic beverages?

Doctor Bayley: Alcoholic beverages, in moderation, are of definite benefit.

Dr. R. P. Howard: What is the effect of arterenol on coronary flow? It is frequently used during the acute infarction.

Doctor Bayley: This drug increases coronary flow by increasing peripheral resistance. The greater pressure head on the aortic end of the coronary system increases the pressure differences across the system and results in more blood being moved in a unit of time.

Dr. R. M. Bird: What is the clinical significance of angina at rest or at night?

Doctor Bayley: This timing of pain is not often the case at the onset of the disease but after a variable period it may appear with increasing frequency and severity. Here it suggests "impending infarction" and additional therapeutic measures are indicated.

Dr. P. M. McNeill: What about the use of long acting nitrites?

Doctor Bayley: I do not believe they are superior to nitroglycerine. I would like to refer this question to Doctor McCollum.

Dr. W. T. McCollum: It has been my experience that there is no effective long acting nitrite. The work by Russek (*Circulation*, 12:169, 1955) suggested that Peritrate, 20 mgm. three times daily on an empty stomach, was the most effective drug tested. This author thought, nevertheless, that sublingual nitroglycerine was the most reliable coronary vasodilator. Another "long-acting" nitrite, Nitroglyn, when given at bedtime may awaken patients with typical nitroglycerin-type headaches. This gives me the impression that Nitroglyn, in some cases, has a long duration.

I frequently recommend a regimen of oral triturated nitroglycerin 1/100 gr. at two to four hour intervals during the day and Nitroglyn 1/25 gr. to 1/10 gr. at bedtime. Patients' acceptance of Peritrate has been variable in my experience. The use of oral nitroglycerin during the daytime has one distinct advantage in that the cost is only 85 cents per 100. Most patients are capable, particularly during the day, of adjusting the dosage voluntarily.

Doctor Wolf: Doctor Johnson, you have been interested in the use of radioactive iodine in patients with persistent angina pectoris and/or resistant congestive heart failure. Would you tell us your views?

Dr. Philip C. Johnson: Thyrotoxicosis should be considered in all cardiac disease of obscure etiology and in all cardiac patients who are doing poorly. At the present, the best way to diagnose a thyrotoxic complication in the cardiac patient is to do a protein-bound iodine and/or an I-131 uptake. Control of the thyrotoxicosis usually brings a dramatic improvement in the cardiac status.

As stated by Doctor Blumgart (J.A.M.A., 157:1, 1955) perhaps five per cent of cardiac patients are chronic invalids in spite of a good cardiac regimen. Various therapies have been proposed to improve the lot of these patients. The treatment of intractable angina and congestive failure by thyroidectomy dates to Doctor Blumgart's early work in which he showed that cardiac work was decreased in myxedema. His early attempts at producing myxedema by a "surgical thyroidectomy" brought dramatic improvement at first, but this was followed by a return of the patient's symptoms as the thyroidal remnants gradually brought the patient back to euthyroidism. The same type of reasoning prompted the use of propylthiouracil. Toxic reactions and the length of time required to produce myxedema have made this drug unwieldy.

"Radiation thyroidectomy" with I-131 offers a simple and potentially permanent way to produce myxedema. Dosages of 30-100 microcuries of I-131 are required to produce a state of myxedema in an euthyroid patient. Any response to a dose below 30 mc. suggests that in reality one is dealing with a thyrotoxic patient. The onset of myxedema occurs from two weeks to three months after the therapy. I-131 treatment should be reserved for patients who are incapacitated by angina and/or congestive failure and whose status has remained stable over a period of about one year. This therapy attempts to produce a nebulous clinical state which is neither myxedema nor euthyroidism but in which the patient is less symptomatic.

Remember that angina and/or congestive failure may accompany myxedema. Over the past six months I have seen four such patients and all became essentially asymptomatic on thyroid medication. Therefore, myxedema, as a complication of already existing heart disease, should be watched for and treated in any patient who has received I-131. The patient presented here today does not at the present time fulfill the requirements for 1-131 therapy.

Doctor McCollum: It seems to me that we have been guilty of applying the term "intractable angina" to a patient who has had a myocardial infarct only two months ago.

Doctor Bayley: I should think that the patient would have to have his pain for six months without control by the usual methods before we consider it intractable.

Association Activities



PRESIDENT'S LETTER

A new birth in Oklahoma has been recorded in many of our United States. Conceived in the minds of our State's great thinkers—men with vision, courage and philanthropic spirits—the Frontiers of Science Foundation of Oklahoma, Inc., was born only a few months ago.

The Frontiers of Science Foundation of Oklahoma had three primary objectives to be initiated at the earliest possible date—namely, to get Oklahomans interested in science, to build Oklahoma as a research center and to develop Oklahoma as a scientific industrial site. Such a far reaching program as this meant that money in a sizable amount would be needed and within a few hours relatively few men had deposited in the bank $400,000.00 to the credit of The Frontiers of Science of Oklahoma.

This program was presented to the greatest scientists and philanthropists of our nation who not only received it enthusiastically, but many of them have pledged full cooperation and support with much praise to Oklahoma and Oklahomans for the first such forward looking move in the history of our country. Already one of our institutions of higher learning has received a grant of $250,000.00 for research, the direct result of the work of the Frontiers of Science of Oklahoma.

At the present time there are twelve top bracket men from here in the east who are visiting the great research centers getting ideas, plans and guidance in this endeavor.

The Frontiers of Science in Oklahoma has financed a comprehensive state wide general information service and is surveying the aptitude tests in high schools to determine what the high school students are getting or not getting in the fields of science education. Special emphasis is being given in the examination to the following topics particularly, science as taught in high schools, students' interests in science and finding potential scientists. This program will be carried out by the State Superintendent of Public Instruction. The Atoms for Peace exhibit shown in Geneva will be here April 15 to May 5 for the midwestern people to see. This will be the first showing in the U. S. with the exception of a limited display in New York. It will cost $56,000.00 to set this display up and we have been rather reliably informed that one Oklahoman has assumed this responsibility.

This is merely a briefing of a very few of the undertakings and doings of The Frontiers of Science Foundation of Oklahoma, Inc. Ideas, action, deeds—these, in the writer's opinion, are the beginning in Oklahoma of a renaissance in science, research and industry, elevating all professional, technical and vocational endeavors, the foundation of which is science and its application.

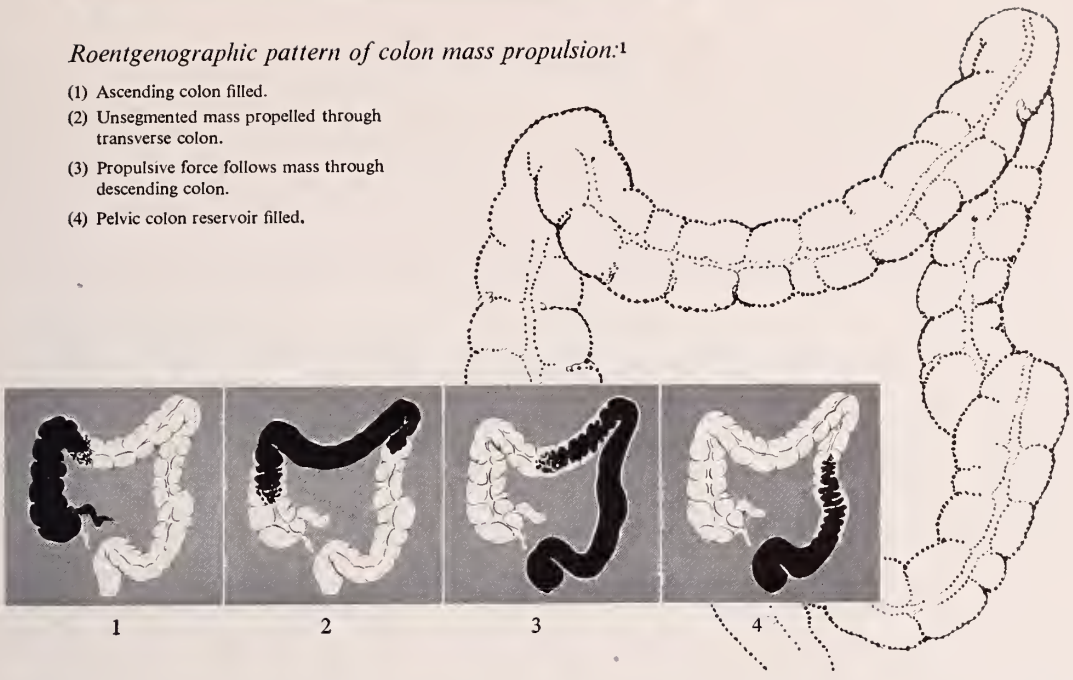
R. L. Goodwin

President

SMOOTHAGE ACTION IN CONSTIPATION

Roentgenographic pattern of colon mass propulsion:[1]

(1) Ascending colon filled.
(2) Unsegmented mass propelled through transverse colon.
(3) Propulsive force follows mass through descending colon.
(4) Pelvic colon reservoir filled.



Reestablishing Bowel Reflexes with Metamucil®

Nervous fatigue, tension, injudicious diet, failure to establish regularity, too little exercise, excessive use of cathartics—all factors which contribute to constipation.[2]

Sufficient bulk and sufficient fluid form the basic rationale of treatment of constipation with Metamucil.

Metamucil (the mucilloid of Plantago ovata) produces a bland, smooth bulk when mixed with the intestinal contents. This bulk, through its mass alone, stimulates the peristaltic reflex and thus initiates the desire to evacuate, even in patients in whom postoperative hesitancy exists.

Such gentle stimulation is of distinct advantage in reeducating and reestablishing those reflexes which control bowel evacuation. Many factors may pervert the normal reflexes, causing finally chronic constipation. Among them are: nervous fatigue and tension, improper intake of fluid, improper dietary habits, failure to respond to the call to stool, lack of physical exercise and abuse of the intestinal tract through excessive use of laxatives.[2]

Correction of constipation logically, therefore, lies in the suitable adjustment of these factors. The characteristics of Metamucil permit the correction of most of these factors: it provides bulk; it demands adequate intake of fluids (one glass with Metamucil powder, one glass after each dose); it increases the physiologic demand to evacuate; and it does not establish a laxative "habit." Metamucil, in addition, is inert, and also nonirritating and nonallergenic.

The average adult dose is one rounded teaspoonful of Metamucil powder in a glass of cool water, milk or fruit juice, followed by an additional glass of fluid if indicated.

Metamucil is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is supplied in containers of 4, 8 and 16 ounces. G. D. Searle & Co., Research in the Service of Medicine.

---

1. Best, C. H., and Taylor, N. B.: The Physiological Basis of Medical Practice: A Text in Applied Physiology, ed. 5, Baltimore, The Williams & Wilkins Company, 1950, pp. 579-583.
2. Bargen, J. A.: A Method of Improving Function of the Bowel, Gastroenterology *13*:275 (Oct.) 1949.

SEARLE

HAVE YOU HEARD?

HENRY C. SMITH, M.D., has moved from Walters to Lawton.

ROBERT T. CRONK, M.D., Tulsa, was guest speaker at a recent meeting of the Oklahoma Hearing society.

C. E. WOODARD, M.D., Drumright is building a new clinic in that city.

ROBERT H. FURMAN, M.D., Oklahoma City, was guest speaker at a recent meeting of the Shawnee Lions club.

L. G. BLACKMER, M.D., Hooker, was recently featured in a newspaper article commending his polo playing though he is a 74-year-old physician.

KENNETH ANDREWS, M.D., has joined the Northside Medical and Dental Clinic in Oklahoma City.

W. P. JOHNSON, M.D. has opened his office in Bokchito.

ELI ABRAMSON, M.D., McAlester, has recently received his U. S. citizenship. A native of Canada, he has resided in the U. S. since 1949.

FRANK H. MCGREGOR, M.D., Tulsa, has been named Tulsa County physician.

ROBERT E. HERNDON, M.D., Chickasha, has recently been certified by the American Board of Pediatrics.

EMRY G. HYATT, M.D., Tulsa, is the new chief of staff of St. John's Hospital.

ALBERT H. KRAUSE, M.D., chief of surgical service at the Veterans Administration Hospital in Muskogee, has been presented an award for his leadership in training young surgeons at the hospital.

JOHN R. DANSTROM, M.D., Oklahoma City, has been elected a fellow in the American College of Radiology.

HOWARD B. SHORBE, M.D., Oklahoma City, has returned to his practice after an illness.

C. L. ROGERS, M.D., has reopened his office in Canton.

L. G. WOLFF, M.D., Okarche, was honored with a "This is Your Life" program sponsored by the VFW Auxiliary.

PETER E. RUSSO, M.D., Oklahoma City, was recently elected Second Vice-President of the Radiological Society of North America at a meeting held in Chicago.

C. S. LEWIS, JR., M.D., Tulsa, has been re-elected president of the Tulsa County Heart Association.

GEORGE M. BROWN, JR., M.D., McAlester, has been retained as surgical consultant and to perform specialized surgery at the Talihina Medical Center. He will continue in his present position at McAlester also.

JOHN TAYLOR KILPATRICK, M.D., son of G. A. KILPATRICK, M.D. of Okmulgee, has recently been made a Diplomate of the American Board of Surgery. A graduate of the University of Oklahoma and George Washington University Medical School, Washington, D.C., he is now in the U. S. Air Corps stationed at Montgomery, Ala. He is a captain and is scheduled to be discharged in August.

JAMES B. PITTS, JR., M.D., Oklahoma City, and ROBERT E. DILLMAN, M.D., Tulsa, were inducted into fellowship in the American Academy of Obstetrics and Gynecology at the fourth clinical meeting of the organization held in December at the Conrad Hilton Hotel, Chicago.

A. A. STOLL, M.D. has retired as medical house physician at Oklahoma General Hospital, Clinton, where he has served since 1938.

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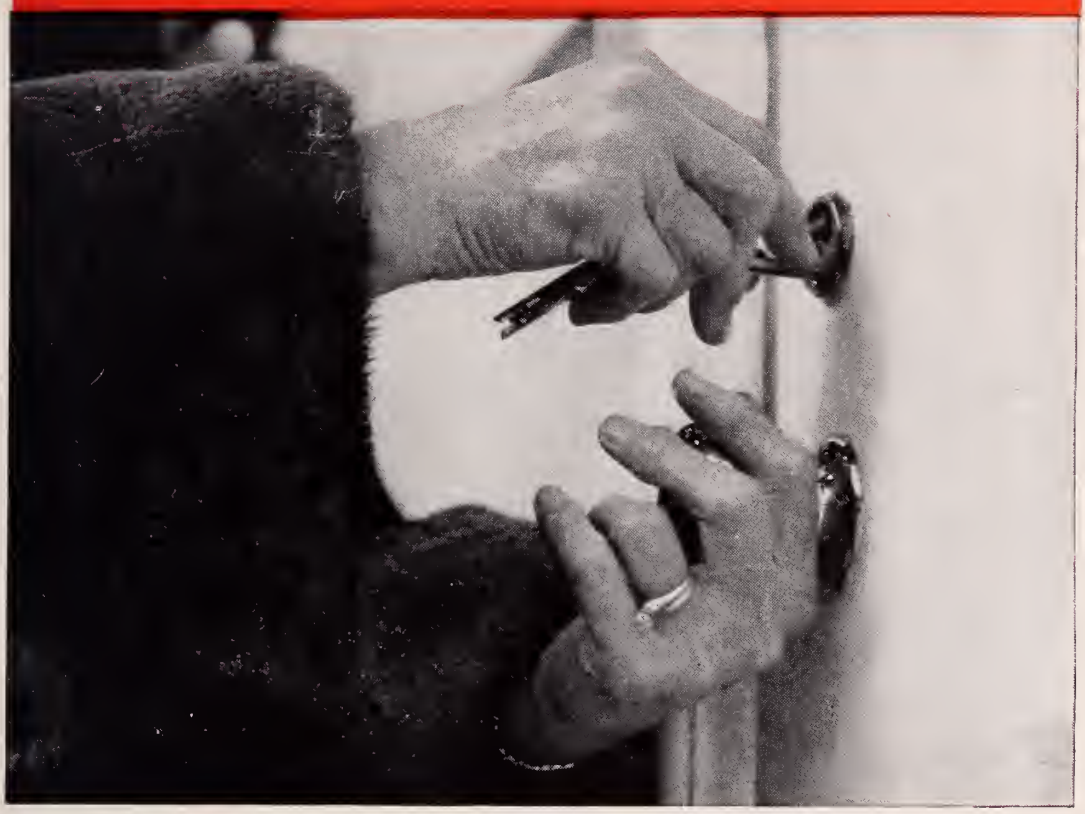
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REFERENCES: 1. Boland, E. W. and Headley, N. E., *J.A.M.A.* **148**:981, March 22, 1952. 2. Ward, L. E., Polley, H. F., Slocumb, C. H. and Hench, P. S., *J.A.M.A.* **152**:119, May 9, 1953. 3. Snow, W. B. and Coss, J. A., *N.Y. State J. Med.* **52**:319, Feb. 1, 1952.

PHYSICIAN PLACEMENT

The following physicians have expressed a desire to locate in Oklahoma. To the best of our knowledge, the names, addresses, qualifications and availability are current and accurate.

The asterisk beside some names indicates that additional information concerning the physician is available in this office.

Anesthesia

*Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

Dermatology

Leonard D. Grayson, 1301 Cornaga Ave., Far Rockaway 91, N.Y. Age 34, medical school unknown (Grade A), Board Eligible in Dermatology, available immediately.

General Practice

*A. Stanley Bailey, Jr., 250 Highland, Apt. 102, Highland Park 3, Michigan, age 26, University of Oklahoma School of Medicine, now interning at Highland Park Hospital, available July 1, would prefer salaried position.

*Charles Dail Davenport, 814 N. Elm, Hoisington, Kansas, age 30, University of Oklahoma School of Medicine, 1953, veteran, available July, 1956.

*John V. Hume, 931 W. 15, Pueblo, Colo., age 31, University of Colorado 1953, residency in general practice, veteran, availability unknown.

*Elmer D. Peffly, Capt., USAF (MC) Aviation Medical Examiner, 3545th USAF Hospital, Office of the Flight Surgeon, Goodfellow Air Force Base, Texas, age 34, University of Oklahoma School of Medicine, 1953, interned at Wesley Hospital, Oklahoma City, available July, 1956.

*Harvey Lewis Paul Resnik, Philadelphia, Pa., Philadelphia General Hospital, age 25, College of Physicians and Surgeons, Columbia University, 1955, available July 1, 1956.

Internal Medicine

*Marvin J. Colbert, Apt. 110, 809 S. Marshfield Ave., Chicago 12, Ill., age 31, University of Boston 1949, two and one-half years residency in internal medicine, veteran, available August 1, 1955.

*William Prothro Jolly, 803 Fifth St., Rural Route No. 1, Iowa City, Iowa, age 32, University of Michigan, 1949, residency in internal medicine, veteran, available July 1, 1956.

*C. A. Loughridge, 1107 E. Upsal St., Philadelphia 19, Pa., age 36, College of Physicians and Surgeons Columbia University 1954, in internal medicine residency at Philadelphia General Hospital, available between July and September, 1956.

*Alfred M. Steinman, 515 Ocean Ave., Brooklyn 26, N. Y., age 32, Long Island College of Medicine 1949, residency in Internal Medicine and Cardiology, veteran, available immediately.

Orthopedics

*Andrew G. Hudacek, Kosair Crippled Children Hospital, Louisville 17, Kentucky, age 31, Georgetown University 1948, Board eligible in Orthopedics, veteran, available October 1, 1955.

Robert E. Landstra, American Legion Hospital for Crippled Children, 2350 Lakeview Ave., St. Petersburg, Florida, age unknown, now in orthopedic residency training, availability unknown.

Pathology

*James Kendall Boyd, 1745 S. St. Louis Ave., Tulsa, Okla., age 39, University of Tennessee 1942, Board eligible in Pathology, veteran, available immediately.

*William McIntosh Hindman, Receiving Hospital, Detroit, Michigan, age 38, University of Tennessee, 1945, four year pathology residency, Detroit Receiving Hospital, Board eligible, available July, 1956.

Pediatrics

*Arthur T. Hall, 314 Allison St., Sayre, Pa., age 33, University of Rochester 1952, two year residency in Pediatrics, veteran, available July 1, 1955.

*Leslie W. Langley, Jr., 1709 De Pauw Ave., New Albany, Ind., age 32, University of Louisville School of Medicine, 1953, now taking second year of pediatric residency, veteran, available July 1, 1956.

*Ralph Lee Perry, 10812 Mt. Carmel Rd., Cleveland 4, Ohio, age 32, Western Reserve University, 1953, two years, appr. pediatric training, veteran, available July 1, 1956.

*Carl Frederick Wagner, 130 E. Shields, Cincinnati 20, Ohio, age 48, University of Cincinnati, 1935, interned University Hospital of Cleveland and served residency at Cincinnati Children's and Cincinnati General Hospital, veteran, prefer clinic or associate, available May 1.

Surgery

*Albert Frederick Cunningham, U. S. Naval Hospital, Memphis, Tenn., age 35, University of Arkansas, 1947, interned St. Joseph Infirmary, Louisville, Kentucky, residency at University of Arkansas (pathology) and Methodist Hospital, Indianapolis, Ind. (general surgery), available April 15.

*Edward Wendell Foster, 147 W. Main, Meriden, Conn., age 62, Harvard University School of Medicine, 1924, interned Grasslands Hospital, Westchester County, Roosevelt Hospital, New York City, and Boston Lying-In; residency in surgery at Roosevelt Hospital, New York City, certified by specialty board, veteran, available now, would consider surgery, obs.-gyn., or general practice.

Alice F. Gambill, 1605 Clover Lane, Fort Worth, Texas, University of Oklahoma 1949, one year residency in General Surgery, available immediately.

*William A. Holbrook, Jr., University Hospital, Baltimore, Maryland, age 34, University of Maryland 1945, Board qualified in General Surgery, veteran, available August, 1955.

*C. Richard Jernigan, Parkland Memorial Hospital, Dallas, Texas, age 29, Southwestern Medical College 1948, will be Board qualified in General Surgery January 1, 1956, veteran, available January 1, 1956.

Urology

Woodrow Payne, M.D., 764 McConnell, Memphis, Tenn., age 34, University of Tennessee, 1944. Board Qualified in Urology, veteran, available July, 1956. (Wants city 20,000-75,000 — private proup, partnership).

*David M. Stahl, 2624 W. 75th Pl., Kansas City 13, Missouri, age 28. Baylor College of Medicine 1952, in residency in urology, veteran, available July 1, 1956.

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Deaths

Loren Cecil Presson, M.D.
1881-1955

L. C. Presson, M.D., retired Tulsa physician, died November 30 at his home following a heart attack.

Born in Carbondale, Ill., he was graduated from the St. Louis College of Physicians and Surgeons and began his practice in 1909 in Collinsville.

After serving as a major in the medical corps during World War I, he came to Tulsa. In addition to medical organizations, he was active in the Collinsville Masonic Lodge, Oklahoma Consistory, Guthrie, and the Carson-Wilson American Legion Post and Akdar Shrine. He was a life member of the O.S.M.A.

William O. Hartshorne, M.D.
1868-1955

William O. Hartshorne, M.D., pioneer Oklahoma physician, died December 19 following a long illness.

Doctor Hartshorne began his medical career in 1888 and had practiced in Spiro, Skullyville, New Mexico and Arizona. He also served in the U. S. Army during World War I. He had been a Mason for 50 years.

Nathaniel N. Simpson, M.D.
1869-1956

Nathaniel N. Simpson, M.D., Henryetta, died January 9.

Doctor Simpson came to Henryetta in 1907 from Falmouth, Kentucky and practiced there until he retired about 17 years ago due to illness. He was a member of the Christian church and the Grant Masonic Lodge 85 at Williamstown, Kentucky.

Frederick Addison Anderson, M.D.
1878-1956

Frederick Addison Anderson, M.D., pioneer Claremore physician, died January 7 at his home following a two year illness.

Doctor Anderson, who was born in Subligna, Ga., came to Claremore in 1903 soon after his graduation from Louisville Medical College. He was a director of the First National Bank and was a 32nd. degree Mason and member of the Episcopal church.

Survivors include the widow of the home and two sons, Douglas Anderson, M.D., Claremore, and Paul Sanford Anderson, M.D., Fort Supply, and a daughter of Washington, D.C.

George H. Niemann, M.D.
1883-1955

George H. Niemann, M.D., retired Ponca City physician, died December 31, 1955 at Barnes Hospital in St. Louis of a heart ailment.

Doctor Niemann, a pioneer physician of the Ponca City area, came to that region about six weeks after the opening of the Cherokee Strip. He attended the University of Kansas and Northwestern University, Chicago, where he was graduated in 1905.

Active in civic affairs, he was a past president and director of the Chamber of Commerce, past president of the Ponca City Rotary Club and former chief of staff at Ponca City Hospital.

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The Annual Meeting HOBBY SHOW

Your Annual Meeting this year will not only offer an excellent scientific program, but will also provide you with an opportunity to show the rest of the Oklahoma physicians what you do in addition to practicing medicine. If you have a hobby suitable for exhibition, we encourage you to bring it with you to the State Meeting so that others may share your interests.

Space has been reserved near the Registration Desk adjacent to the Commercial Exhibit area. We would like to have your hobby on display Monday and Tuesday, May 7 and 8, 1956.

Your hobby will be protected by a policeman who will be on duty 24 hours each day. Also, there will be insurance coverage provided by the State Association. If you already have it insured, we suggest that you check with your agent to see if your hobby will be covered while on exhibition. The State Association will take every precaution to protect your exhibit, but cannot be held responsible.

Since space will be limited, we hope that you will fill out and return the application blank below at your earliest convenience.

Please send your application before April 1, to Mrs. D. Nello Brown, Chairman, Hobby Show Committee, Oklahoma State Medical Association Woman's Auxiliary, 1227 Classen Drive, Oklahoma City 3, Oklahoma.

APPLICATION FOR HOBBY SHOW SPACE

63rd Annual Meeting

OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City • May 7, 8, 1956

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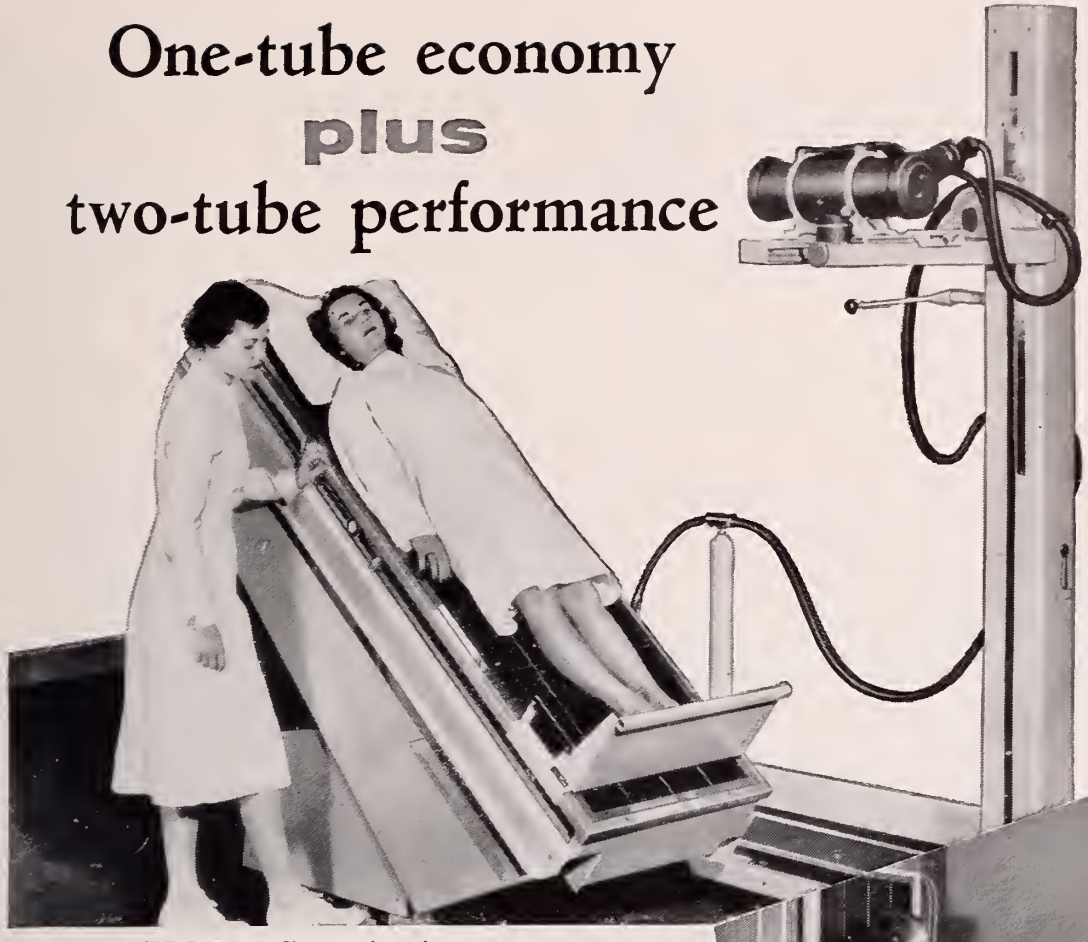
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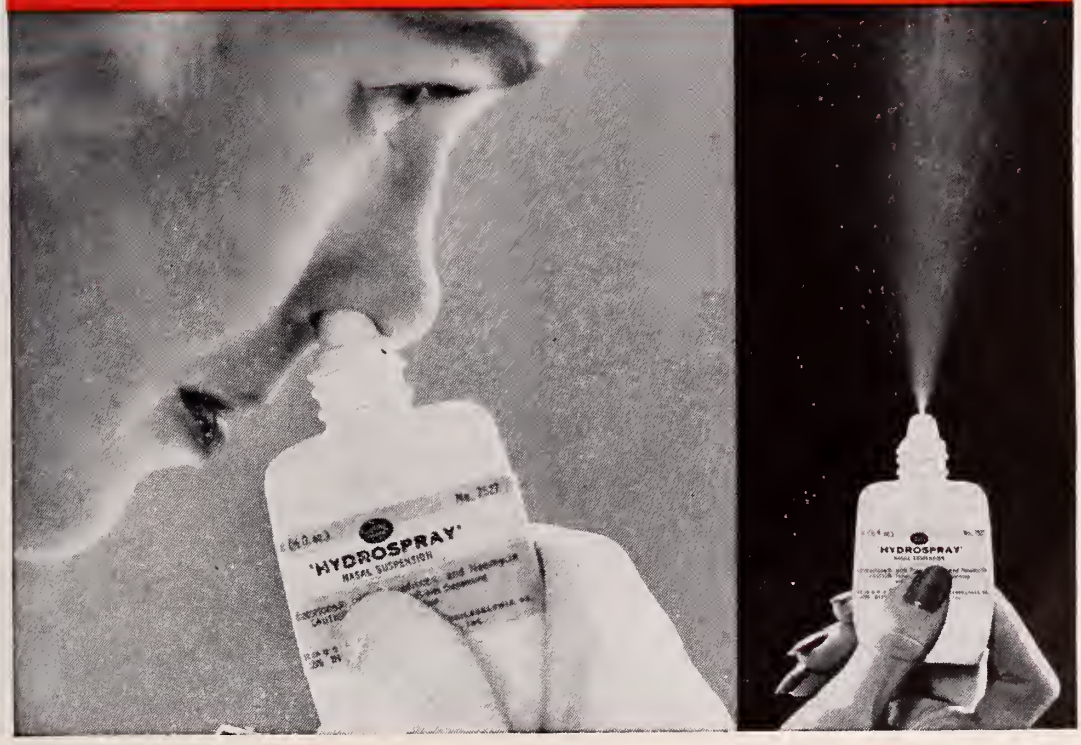
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Topically applied hydrocortisone[1] in therapeutic concentrations has been shown to afford a significant degree of subjective and objective improvement in a high percentage of patients suffering from various types of rhinitis. HYDROSPRAY provides HYDROCORTONE in a concentration of 0.1% plus a safe but potent decongestant, PROPADRINE, and a wide-spectrum antibiotic, Neomycin, with low sensitization potential. This combination provides a three-fold attack on the physiologic and pathologic manifestations of nasal allergies which results in a degree of relief that is often greater and achieved faster than when any one of these agents is employed alone.
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REFERENCE: 1. Silcox, L. E., *A.M.A. Arch. Otolaryng.* **60**:431, Oct. 1954.



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Group Life Insurance Program Moving Slowly

Members of the Association are urged to consider whether or not they will take advantage of the Group Life Insurance Proposal negotiated by the Association with the Massachusetts Mutual Life Insurance Company by February 15.

Under state law, it is required that for a membership the size of the Oklahoma State Medical Association, that a minimum of 600 members enroll.

Two direct mailings have already gone to the membership but should any physician be interested in the program and not know about its provisions, they should immediately write either the Executive Offices of the Oklahoma State Medical Association or the Massachusetts Mutual Insurance Company, First National Bank Building, Oklahoma City. The coverage is in the amount of $10,000.00 life and $10,000.00 accident and can be secured to the age 65 without a medical examination.

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1. Rosenberg, S. and Oster, K. A., "Gelatine in the Treatment of Brittle Nails," *Conn. State Med. J.* 19:171-179, March 1955.
2. Tyson, T. L., *J. Invest. Dermat.* 14:323, May 1950.

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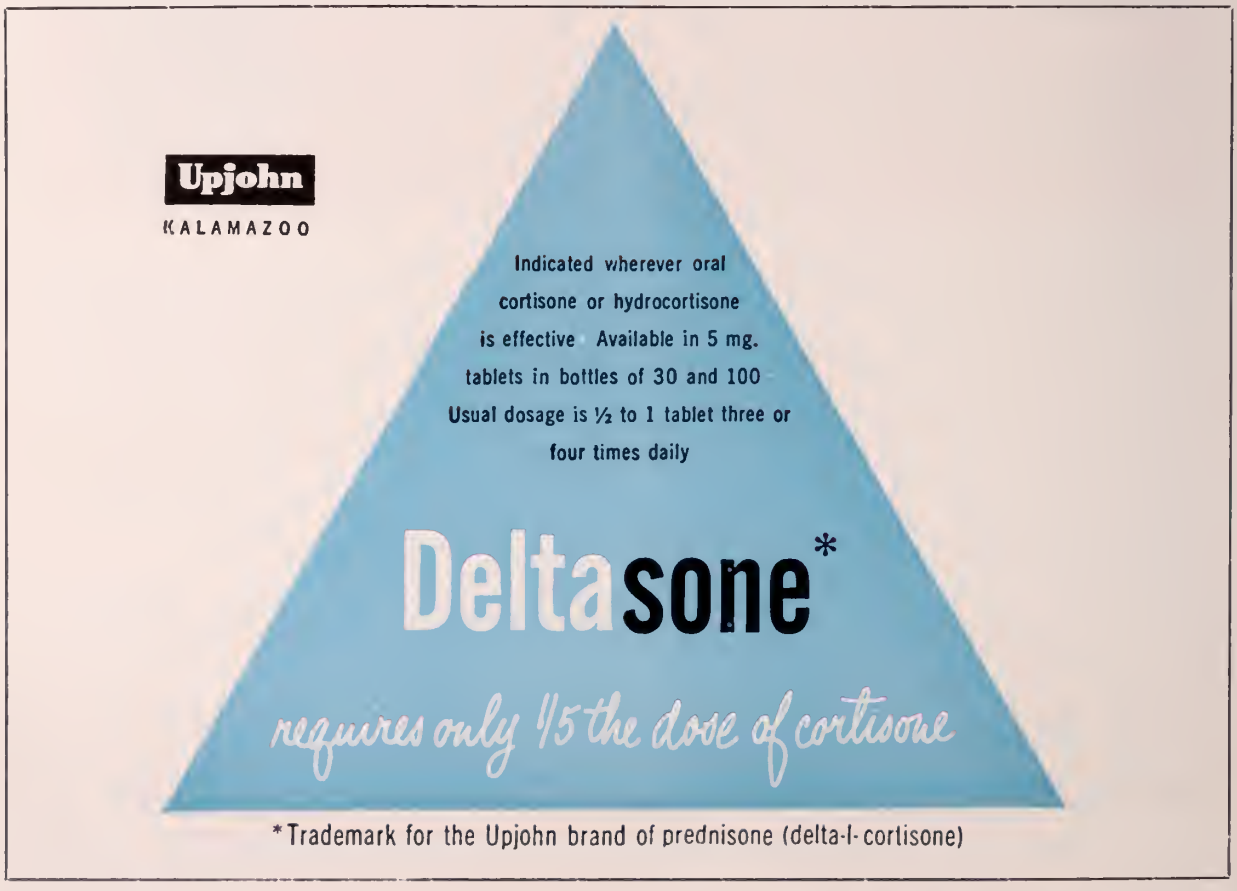
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On 6/3/55 patient was readmitted because of purulent discharge from wound. On 6/3 a hemolytic Staph. aureus (coag. +) was isolated from abscess with the following disk sensitivities: penicillin, 1.5 units; erythromycin, 10 mcg; tetracycline, 10 mcg. Patient was placed on penicillin, 600,000 units b.i.d. for 10 days. On this schedule patient improved but progress was unsatisfactory and wound continued to discharge small amount of purulent material.

On 6/13 penicillin was discontinued and erythromycin started in dosage of 200 mgm. q.i.d. By 6/17 the discharge had stopped and wound was completely healed by 6/19. Erythromycin was continued until the patient was discharged from hospital on 6/21. Temp. was normal throughout hospital stay.

Final diagnosis: breast abscess due to Staph. aureus.

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Communication to Abbott Laboratories.

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U.M.W. Health and Welfare Program Studied by Committee

R. Q. Goodwin, M.D., President of the Oklahoma State Medical Association, has appointed Malcom Phelps, M.D., of El Reno as chairman of a committee to study the operation of the United Mine Workers Health and Retirement Fund. Other members of the committee are Homer C. Wheeler, M.D., McAlester; John F. Park, M.D., McAlester; Robert W. Lowrey, M.D., Poteau; and E. C. Mohler, M.D., Ponca City.

The first meeting of the committee was held in Tulsa at the Mayo Hotel February 4. In attendance at the meeting in addition to representatives of the Association were representatives from the Arkansas State Medical Society and Dr. George Brother of St. Louis, the area Medical Director of the United Mine Workers.

Medical Society Executives' Conference Meets in Chicago

The first conference for Medical Society Executives was held at the Drake Hotel in Chicago February 6, 7, 8. Attending the meeting were Dick Graham and Don Blair, Executive Secretary and Associate Executive Secretary of the Oklahoma State Medical Association.

The conference is held in cooperation with the American Medical Association and is designed to present to medical society executives the latest techniques and advancements in programs of different societies as well as business management and office procedures. More than 300 were in attendance. It is planned to make the conference an annual affair.

Response to Request For Building Fund Outstanding

The rate of payment by members of the Association of the assessment for the building fund has been outstanding. As of February 1, approximately one-third of the members had already made their contributions.

Collection of the assessment is being handled with the Executive Office, although it may become necessary subsequently to make collections through the offices of the secretaries of the county societies.

The architects, Coston, Frankfurt and Short, have completed the working drawings and it is hoped that bids will be made and opened by March 13 with construction to start immediately thereafter.

Officers of OSMA Testify

R. Q. Goodwin, M.D., President of the Association and Malcom E. Phelps, M.D. of El Reno, will represent the Association in presenting testimony on HR 7225, which is the administration's proposed amendments to the Social Security Act.

Doctor Goodwin and Doctor Phelps will testify before the committee in Washington, D. C., Thursday, February 23. Senator Robert S. Kerr is a member of the Senate Finance Committee.

SAMPLING

(Continued from Page 34)

as "acute dilatation of the heart." When questioned how he knew he simply stated, "Everybody that dies has an acute dilatation of the heart so I'm technically correct."

Therefore, when reading a scientific article choked full of statistics, ask yourself, "1. Is this a biased sample? and 2. What are the hidden numbers?"—T.C.P.

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Combines ganglionic blockade action of hexamethonium chloride dihydrate (250 mg. per tablet) with Rauwiloid (1 mg.) in a single tablet for easier, safer, ambulatory management of severe cases. Initial dose, ½ tablet q.i.d.

1. Moyer, J.H., in discussion of Galen, W.P., and Duke, J.F.: Outpatient Treatment of Hypertension with Hexamethonium and Hydralazine. South. M.J. *47*:858 (Sept.) 1954.

2. Moyer, J.H.; Dennis, E., and Ford, R.: Drug Therapy (Rauwolfia) of Hypertension. II. A Comparative Study of Different Extracts of Rauwolfia When Each Is Used Alone (Orally) for Therapy of Ambulatory Patients with Hypertension, A.M.A. Arch. Int. Med. *96*:530 (Oct.) 1955.

3. Wilkins, R.W.; Stanton, J.R., and Freis, E.D.: Essential Hypertension. Therapeutic Trial of Veriloid, a New Extract of Veratrum viride, Proc. Soc. Exper. Biol. & Med. *72*:302 (Nov.) 1949.

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LOS ANGELES

Medical Societies Around the State

Cleveland-McClain

William McCurdy, M.D., Purcell, was elected president of the Cleveland-McClain County Medical Society at the annual dinner meeting of the group. Vice-president is William R. Patten, M.D., Norman, and F. C. Buffington, M.D., is secretary-treasurer. Curtis Berry, M.D., is outgoing president.

Tulsa County

G. R. Russell, M.D., Tulsa, pediatrician, is the new president-elect of the Tulsa County Medical Society. Serving as president now is F. L. Flack, M.D., and Frank J. Nelson, M.D., is outgoing president. James W. Kelley, M.D., is vice-president and Walter E. Brown, M.D., is secretary-treasurer.

Woods-Alfalfa

R. A. Whiteneck, M.D., Waynoka, was recently elected president of the Woods-Alfalfa County Medical Society. Ed Calhoun, M.D., Beaver, was named vice-president and John X. Blender, M.D., Cherokee, secretary-treasurer.

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Foot-so-Port Shoe Company, Oconomowoc, Wis.

Okmulgee-Okfuskee

George Tracewell, M.D., was elected president of the Okmulgee-Okfuskee County Medical Society at a regular monthly meeting held in Henryetta. Jack P. Myers, M.D., was elected vice-president and Cleve Beller, M.D., secretary-treasurer.

Stephens County

The Stephens County Medical Society has joined with the Stephens County Bar Association and the Duncan Ministerial Alliance is setting up a new community family consulting service. The service will have a committee which will counsel with families that need help. Each of the three groups will be represented on the committee and no charge will be made to the families requesting consultation. The service will work with the legal aid society established last year by the Stephens county attorneys.

Ottawa-Craig

Kenneth Lane, M.D., Vinita, is the president-elect of the Ottawa-Craig County Medical Society. Election of officers was held at a recent meeting in Miami. Harry C. Ford, M.D., Miami, is now serving as president and other officers are Norton Ritter, M.D., Picher, vice-president and John E. Highland, M.D., Miami, secretary.

Kay-Noble

T. C. Glasscock, M.D., was named president of the Kay-Noble County Medical Society when the group met recently at the Ponca City Country Club. Other officers are E. C. Yeary, M.D., president-elect; A. M. Brown, M.D., Perry, vice-president; and P. A. MacKercher, M.D., secretary. A scientific paper on "More Accurate Methods of Diagnosing Pulmonary Disease" was presented at the meeting by Robert B. Anderson, M.D., Tulsa.

Oklahoma County

Elmer Ridgeway, Jr., M.D., was installed as president of the Oklahoma County Medical Society at the annual inaugural dinner held January 21. He succeeds D. W. Branham, M.D. and M. M. Appleton, M.D. is president-elect. S. N. Stone, M.D., is vice-president and H. T. Avey, M.D., is secretary-treasurer.

Editorials

Polio Vaccine Again

Desiring to bring the profession up to date on the present status of vaccine, Dr. R. Q. Goodwin, President of the Oklahoma State Medical Association called together Dr. Grady Mathews, Commissioner of Health, and his advisors and the State Committee on poliomyelitis vaccination. Out of this meeting certain facts became clear:

1. The vaccine is short.
2. The N.F.I.P. is out of the vaccine business.
3. Of the six firms licensed to make vaccine, only three have had any on the market since May, 1955, and only one in any great quantity.
4. The method of release for use is as follows: When a lot has been approved by the manufacturer and the N.I.H. (National Institute of Health)the U.S.P.H. is notified that a certain amount of vaccine is ready for use. The U.S.P.H. in turn notifies the state health departments that a certain amount of vaccine is available to them and asks what they want to do with it. Oklahoma's share of each lot released is 1.384 per cent. The State Health Department then tells the U.S.P.H. how much of the allotment is wanted for its own use and how much may be released through commercial channels in Oklahoma.
5. At the present time Oklahoma's health department is taking 40 per cent and releasing 60 per cent for distribution to private physicians.
6. This 40 per cent goes to 30 county health units mostly in the southern and southeastern part of the state where it is given to children whose parents request it from age three months through the eighth grade in school. As the vaccine becomes available, other county health units will be supplied.
7. Congress has appropriated enough funds for the health department to continue this program.
8. Since the vaccine is short and since one injection is 50 to 60 per cent effective, the Commissioner of Health recommends that an effort be made to give all children one injection and after this continue with the second and third when more vaccine is available. The lapse of more than the specified time does not interfere with the immunizing effect of subsequent injections.
9. An effort will be made to get the commercial companies to be fair as possible in their distribution to physicians but there is little hope that all problems can be solved until the vaccine is plentiful.

This is the situation as it exists. We hope that before too long the government's efforts can be limited to those people who cannot, or will not, arrange for their own immunizations.

Fifty Million People in Blue Cross

Today the Blue Cross Plans over the country proudly announce that they are covering one-third of the population of the United States with a Blue Cross contract. This is indeed a feather in the cap of the medical profession, the hospitals, personnel of the plans and the business men who have been interested in the problem of hospitalization for their people. The quite obvious desire of the American people generally to be protected against sudden crippling expense of hospitalization and their equally obvious desire to be able to pay their own way should not be considered lightly.

Great success means also great responsibility. There is one big question that deserves an answer. In the minds of people so protected particularly when industry pays the charge, does it make a real difference who is Uncle, Blue Cross. the insurance companies or Sam? Complete coverage for medical care and hospital care is not sound. The will to get well and to stay well must not be softened by the ease of going to bed and being waited on. The right to determine for

himself the what's, the where's, the why's and the who's must not be destroyed by ready accessibility of hospital beds and eager hands without cost. Competition for contracts with industry and with labor unions is more a matter of the amount and number of services offered than cost. The individual and his real needs, not wants, must not be lost sight of.

It would seem that the real answer is a system in which the stinger of financial catastrophy is removed, but the little pain of some payment remains—enough pain to make the experience undesirable, to be avoided if feasible, and to be terminated as soon as possible.

Standard Deviation

The one calculation the statistician, or the clinical reader watches for (and if this is not given, an eyebrow changes position) is the *Standard Deviation*, expressed by the Greek letter, sigma (Σ). This is the measure of the scatter of the observations around the mean. It represents the variation of an individual observation and can be either plus or minus from the mean.

The amount which each observation varies from the mean is obtained and is called—the deviation from the mean. This is either a plus or a minus figure also. It is much easier to work with two like figures such as two positive numbers; rather than a positive and negative. To accomplish this and make for more accuracy, these figures are squared (deviation from mean x deviation from mean). These squared deviations are all added and the sum is divided by the number of observations. The standard deviation is finally obtained by extracting the square root of this figure (for having squared the original deviation, the reverse step of extracting the square root must finally be made).

A large standard deviation denotes a wide frequency distribution around the mean and usually a smaller range. (The range is the difference between highest and lowest observation.) This is used in the normal frequency distribution curve discussed in December and January issues. One times the Standard Deviation from the mean (either above or below) will include two-thirds of all cases observed and two times the Standard Deviation from the mean (either above or below) will include 95 per cent of all cases observed, if this work exhibited a normal frequency distribution. For example, if 100 women gained an average (mean) of 20 pounds each during their pregnancy and the standard deviation is four pounds; two-thirds, or 66 of them gained between 16 and 24 pounds, or one standard deviation on each side of the mean. Ninety-five gained between 12 and 28 pounds or two standard deviations on each side of the mean. Then two and one-half per cent gained less than 12 pounds and two and one-half per cent gained more than 28 pounds. The latter cases are the important ones to analyze as to the reasons for their variance from the so-called normal cases.

Standard deviation calculations are utilized still another way: To substantiate the probability of two series of cases being significantly different or was the apparent difference of such an extent that this could have occurred by chance alone rather than as the result of better treatment, care, etc.?

As an example, one hospital had 5,591 deliveries of which 476 were classified as prematures. To obtain their premature rate 476 is divided by 5,591 x 100 equalling 8.5 per cent. The standard deviation would be calculated thus: 8.5 ÷ 5,591 = .00152 x 100 = .152 per cent. The square root of .152 per cent is approximately .4 per cent which is the standard deviation and would be reported as 8.5 ± .4 per cent. Thus at this hospital their premature rate could vary from 8.9 per cent to 8.1 per cent and this change could be due to chance alone, since this deviation is based on the chance probability.

Then another hospital had 16,764 babies of which 1,318 were premature. Their rate would be 7.9 per cent. Immediately the unsuspecting reader says, "Oh, oh, this hospital has a lower premature incidence. I guess what they do is better." But, by calculating the standard deviation (7.9 ÷ 16,764 =) .0047 x 100 = $\sqrt{.047}$ = .2 per cent) for this hospital. With this answer we became a little dubious of the good results. To be more nearly sure, one further step is necessary to see if this difference is significant.

(Continued on Page 86)

Letters to the Editor

TO THE EDITOR:

I have read with interest Dr. Marvin Elkins' article on spinal anesthesia in obstetrical deliveries in the December, 1955, issue of the *Journal*. It seems that some comments are in order concerning the method of spinal anesthesia reported. In these remarks I shall speak only as an anesthesiologist, and shall in no way attempt to evaluate the procedures from the obstetrical viewpoint.

I can decide on no better method of discussing Dr. Elkins' article than to take up the points he has listed in his "Discussion" and offer remarks concerning them.

1. "Many large centers require that a physician be in constant attendance following administration of spinal anesthesia."

This requirement is obviously ideally desirable; but, I must agree with Doctor Elkins that such a requirement is impractical in a general practice where physicians are at a premium, and where often the obstetrician must administer his own spinal anesthesia or deny the patient the benefits of the method. If a physician trained in anesthesia is available, it would seem a needless hazard for the obstetrician to undertake the practice of two branches of medicine at one time, thus dividing his attentions.

2. "Most physicians have stated a high incidence of anesthetic failure."

This "high incidence" has not been our experience even in administration of spinal anesthesia when dilatation is complete and the head is on the perineum. Lack of cooperation on the part of the patient at this stage has been thought to be due to improper sedation, coupled with a lack of explanation in advance as to what will be necessary in giving of the anesthesia. We have used spinal anesthesia in the first stage of labor with the more conventional techniques and had good results. However, we prefer to wait until dilatation is complete, in the primipara, or until termination of labor is imminent in the multipara.

3. "Many have objected because of anesthesia of too short duration and/or inadequate control of pain."

This objection would undoubtedly be overcome by the tremendous doses of pontocaine Doctor Elkins uses, but this is at the sacrifice of safety. Anesthesiologists are in agreement that 20 milligrams of pontocaine intra-thecally is a gross overdosage for low spinal anesthesia. Doctor Elkins has been indeed fortunate to have given this dose in many cases and had no reportable serious complications. Doubtless the one point in technique which has prevented serious trouble to this time has been the use of a hyperbaric solution and the marked degree of head-up position (ten degrees). The use of this position, however, with large dose spinal anesthesia may lead to marked hypotension and cerebral anemia, since sympathetic paralysis is always significantly higher than somatic anesthesia. An incidence of eight per cent of use of vasopressor drugs is unusually high in our experience with conventional saddle block anesthesia. I would predict that more patients would develop significant hypotension in a larger series. Duration of conventional saddle block anesthesia can be prolonged by the addition of adrenalin (as little as 0.1 milligram) to the mixture injected. We have had quite adequate control of pain with doses of five to six milligrams of pontocaine mixed with an equal volume of 10 per cent dextrose. I have repeated this when the duration of the original dose was inadequate for the full delivery time, and I would not hesitate to repeat it again if necessary.

4. ". . . time in attendance . . ."

We are in complete agreement with Doctor Elkins that spinal anesthesia does not demand excessive amounts of time from the obstetrician. (In making this remark I perhaps deviate from my avowed purpose of offering no remarks from the obstetrical viewpoint. Once again, it is the opinion of an anesthesiologist only.)

5. It is felt that even though Doctor Elkins reports no cases of spinal anesthesia slowing down labor significantly, the high dose used will sooner or later give too high a level of anesthesia and labor will be slowed

or stopped. Smaller doses carry a much greater margin of safety in this respect.

6. "Many think that there is too high an incidence of so-called 'spinal headache'."

There is widespread agreement wth Doctor Elkins that small gauge needles reduce the incidence of this troublesome though not serious complication to a minimum. I unfortunately have no personal statistics, but after talking with my anesthesia colleagues and some obstetricians who request spinal anesthesia, I believe the incidence with our technique which employs a 22 gauge needle is in the neighborhood of 10 per cent. This is not felt by either anesthesiologists or obstericians to be high enough to warrant using other forms of anesthesia. I congratulate Doctor Elkins on his absence of headaches with the 24 gauge needle. The only objection to the small gauge needle is the increased chance of breakage during the lumbar puncture.

7. We have not seen central nervous system complications following conventional saddle block anesthesia for obstetrics. I do feel, however, that one increases the risk of such complications by the use of very high doses of anesthetic drugs.

In summary, it is the opinion of the writer that spinal anesthesia is definitely the anesthesia of choice for vaginal delivery (and for Cesarean section as well) since it offers so many advantages to the mother and infant. However, it is also felt that such anesthesia should be carried out with conventional doses of drugs. The dangers of spinal anesthesia are greatly increased by overdosage. I believe that if doses of 20 milligrams of pontocaine are used widely that maternal mortality may result from slips in technique and that spinal anesthesia will be thrown into disrepute. We must therefore recommend that Doctor Elkins' technique not be employed, but that the usual saddle block techniques with small doses be used instead.

The above comments were written in consultation with, and on the suggestion of, the anesthesiologists of Oklahoma City.

Sincerely yours,

s/R. GIBSON PARRISH, M.D.
President, Oklahoma Society
of Anesthesiologists

TO THE EDITOR:

There are several points in Doctor Elkins' recent article[1] concerning saddle block anesthesia in obstetrics which deserve criticism.

His recommended dosages (20 mgs. of pontocaine) is considerably excessive and therefore dangerous. Five mgs. of pontocaine in two ccs. of 10 per cent dextrose solution is ample for saddle block anesthesia. Larger doses may produce levels of anesthesia much higher than needed, which in turn impedes or may arrest labor and also is more apt to cause maternal hypotension. Both of these complications may be detrimental to the fetus.

Injection of the drug during uterine contraction is dangerous because higher levels than desired may result. This is undesirable for reasons listed above. Levels no higher than the 10th thoracic dermatome are satisfactory for all types of vaginal delivery with the exception of interuterine manipulations such as version and extraction where saddle block is contraindicated.

The blood pressure of the patient should be watched carefully (by checking every five minutes) throughout the duration of the anesthesia. If hypotension occurs, it should be treated by intramuscular ephedrine 30 to 50 mgs. or neosynephrine three to five mgs. Oxygen inhalations should also be given until the blood pressure reaches a normal level. The patient's feet should also be elevated. Uncorrected hypotension is potentially harmful to the mother and especially to the fetus. Pressor drugs and a means of administering oxygen and artificial respiration should always be immediately available where spinal anesthesia is being administered.

This is a safe and effective method of providing obstetrical analgesia, preferably as a semi-terminal or terminal method, when properly performed with meticulous attention to precautions and details. Carelessness in its application make it dangerous and would therefore injure the reputation of a good method as well as harming your patients.

Very sincerely,
s/HOWARD A. BENNETT, M.D.
2010 S. Utica Tulsa, Oklahoma

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Scientific Articles

Hemolytic Anemia and Hepatitis From METHYL ALCOHOL POISONING, *Report of a Case*

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While it is very convenient to consider various organ systems as independent and separate entities for the purpose of diagnosis and treatment, a number of conditions unfortunately cannot be forced into the conventional organ system pattern. The connection between the spleen and diseases of the blood has been recognized for many years, but only recently has evidence begun to accumulate that the liver may also be involved in such diseases, specifically, the hemolytic syndromes.[1]

In the case presented here, both hemolytic anemia and hepatitis occurred as a result of a specific toxic agent, methyl alcohol. While hepatitis is commonly observed in methyl alcohol poisoning, there are no reports of hemolytic anemia caused by this agent. Finally, the combination of hepatocellular and hemolytic jaundice produces an extreme concentration of biliary pigments in the blood, which is noteworthy as a medical curiosity.

Report of a Case

D.M., a 62-year-old, three-quarter Creek Indian, was admitted to the hospital on Dec. 18, 1953 with the complaint of nausea and vomiting and severe abdominal pain of one week's duration. While occupied at his usual work of house painting a week before admission, the patient said, he had nausea and vomiting and colicky abdominal pain localized in the epigastric region. Intermittent fever had been present. This condition had remained essentially unchanged until the day of admission. Then he consulted a physician who performed a urinalysis, told him he had hematuria, and advised immediate hospitalization.

From the W. W. Hastings Hospital (U. S. Public Health Service). The views expressed in this paper are the views of the author and do not necessarily represent those of the Public Health Service.

The patient denied any blood dyscrasia, biliary disease or previous attacks of a similar nature. He had been hospitalized at the age of 48 for fracture of the fibula. This lesion healed normally. Wassermann was negative at that time. He was treated for influenza in 1952, when the hemoglobin was 69 per cent and RBC 3,900,000, and later in 1952, for chest pain which could have been angina. At this time the hemoglobin was 70 per cent and RBC 4,000,000. Chest roentgenogram during this admission was essentially negative.

Familial history of blood dyscrasia was absent.

Physical examination revealed an acutely ill white man, severely jaundiced and in considerable pain. Temperature was 103, pulse 128, respiration 28 and blood pressure 130/80. The patient was toxic and had difficulty in recalling and expressing the events of his illness. His abdomen was distended, and epigastric tenderness and muscle guarding were present. The remainder of the examination was essentially negative.

Laboratory findings were as follows: WBC 17,200; RBC 2,670,000; Hb. 7.5 gm.; 82 neutrophiles; 16 lymphocytes; one monocyte; one basophile; a few neucleated RBC noted; urine positive for bile, 1+ albumin, few heavy granular casts; icterus index 259, direct positive Van Den Bergh 12 mg.

The patient was started on penicillin, 300,000 units once daily. Since he was unable to tolerate food by mouth, he was given

2,000 cc. 10 percent glucose in normal saline daily. Abdominal pain and distention worsened, and it was necessary to institute continuous gastric drainage through a Wangensteen suction and stomach tube.

After three days the patient's condition was essentially unimproved, and penicillin was discontinued. The leukocyte count had risen to 20,950 with four per cent neucleated RBC. Despite the evidence of hemolysis, the patient's condition was very suggestive of a surgical abdomen. 500 cc. whole blood was given. The patient continued to be disoriented at times, and abdominal pain and distention continued.

On his fourth day in the hospital the patient suffered a severe nasal hemorrhage precipitated by the nasal suction tube, which was removed. After the tube was removed, the patient had several episodes of emesis of coffee ground material. The gastric tube was reinserted with some relief. On his fifth day in the hospital, severe hiccup developed. Because of the possibility of toxic hemolysis with secondary liver involvement, cortisone was begun. Within 24 hours the patient became and remained afebrile but continued to hiccup. Slow clinical improvement was manifested, and the suction was removed on the eighth day. Thereafter the patient rapidly improved and was discharged on the 19th day.

Attempts to discover any surgical lesion of the biliary passages were negative. A gallbladder series showed no dye absorption, but the cephalin flocculation was 1+ and 2+ at this time. Fragility test showed slightly decreased fragility over normal controls (partial hemolysis at 0.22 dilution). The results were unchanged by refrigeration. Test for sickle cells was performed on two occasions on the patient and once on his sister. Results were 15 per cent abnormal forms in 24 hours on the first occasion and negative on the second instance and in the sister.

During the period of recovery, the patient admitted that he had drunk a quantity of methyl alcohol just before the onset of his illness.

The patient was rehospitalized on Feb. 1, 1954 for persistent hepatitis. Gallbladder series and gastrointestinal series at this time were negative. Cephalin flocculation was 2+ and 2+; RBC 4,000,000; Hb. 90 per cent. Coombs' test and attempts to elicit sickling phenomenon were negative.

Comment

In the symptomatology of this case, there appear to be two definite and distinct syndromes. One is the acute hepatitis produced by alcohol, commonly by methyl but occasionally by ethyl. This patient had a history of rather steady if unspectacular consumption of alcohol. Ample evidence of chronic liver damage from such a practice exists. Phillips and Davidson have recently published a review of acute liver failure superimposed on chronic cirrhosis influenced by alcoholism.[1] I must say influenced, since the exact relationship between chronic alcoholism and liver disease is not definitely known. Opinion remains divided between a secondary relationship due to nutritional deficiencies which develop in the alcoholic and a more direct toxic effect on the liver cells.

In the initial clinical aspects, this case was typical of those in the series reported by Phillips and Davidson. There is an intense jaundice, leukocytosis, a tendency to hemorrhage and coma. All patients with this syndrome who had an icterus index of more than 200 died. A considerable proportion of the elevated icterus index in this case was due to hemolysis rather than to liver damage. In recent literature these two lesions have been linked.

Jones and associates have recently published a study of red cell survival in liver disease which shows that there is an increased tendency toward hemolysis in all forms of hepatic impairment.[2] They point out that while anemia accompanying liver disease is quite common, definite hemolytic syndromes are relatively rare.

To prove this a case of hemolytic anemia and hepatitis one must rule out sickle cell anemia. In this tribe of Indians there is a varying admixture of colored blood, dating back to the days when they traded in slaves, before the migration to Oklahoma. Repeated tests on both the patient and members of his family failed to reveal any evidence of the sickle cell trait. Certainly the patient could hardly have reached the age of 60 without some attacks. Since sickle cell crisis

is a disease of childhood, attacks usually begin before the age of 12. The age of the patient is, in itself, enough to rule out any of the congenital hemolytic syndromes.

The question of a surgical lesion is somewhat harder to resolve. A syndrome, consisting mainly of fever and associated general malaise for two-three days following operation, is often seen following cholecystectomy. Various explanations are given for this reaction. Some authors ascribe it to cholangitis, while others consider it a peritoneal reaction from bile contamination, bile leakage or both, during and after operation. I lean to this view and have treated four cases postoperatively with cortisone in small doses with excellent response in all. In view of these results, it is theoretically possible that this patient had a ruptured gallbladder which the natural process of healing was able to control with the aid of cortisone. The normal gallbladder films after recovery are sufficient to refute this view, in my opinion.

Let us attempt to retrace the sequence of events in this case. First there was a direct toxic insult to the liver cells, which may have been already weakened by the direct or indirect effects of chronic consumption of alcohol. According to Jones and associates,[2] damage to the liver cells leads to portal obstruction and hypersplenism and thus to increased hemolysis. According to other authors it is possible that alterations in the liver cells may cause alterations in the protein fraction of the plasma, resulting in its functioning as an autohemolytic factor.[3]

It has further been suggested that a virus, specifically Newcastle disease, is responsible for the actual hemolysis in some patients and that the substance detected in the various immunologic reactions is an antivirus.[4] It is also possible that alterations in metabolism mediated or influenced by the liver could actually alter the osmotic properties of the plasma, or, more probably, affect the cell membrane of the red cell to make it more susceptible to damage. In this particular case, there is no reason to implicate the spleen in the hemolytic process, although it is universally considered to play a role in all such cases. The acute pain in the right upper quadrant was most probably due to direct pain from swelling of the liver, and possibly by disturbances in the pylorus of the stomach caused by excessive demands for the intrinsic factor by the hemopoietic system in its efforts to compensate for the increased destruction of red cells.

Hemorrhagic tendencies are related to both liver disease and hemolytic phenomena.[5] The abnormal bleeding seen in this case probably reflects changes in clotting power induced by acute hepatitis, although there is no particular reason why a substance which affects the red cells might not also affect the lining cells of the capillaries.

Coma, related to the hypercholemia, is common in hepatic failure. Nausea and vomiting reflect general toxicity. Leukocytosis is secondary to a generalized hyperplasia of the bone marrow in an effort to compensate for increased red cell loss.

It is most fortunate that therapeutic agents are effective without our understanding the exact mechanism of their action. There are numerous reports of the efficacy of cortisone in both hepatitis and hemolytic anemia.[6] The mechanism of action varies according to one's interpretation of the underlying process. Cortisone or corticotrophins are generally believed to exert a direct effect on the body cells, making them more resistant to various toxins. Thus, their effect would be on the red blood cells to make them more resistant to hemolytic forces, whether osmotic, electrical, immunologic or direct trauma.

Summary

A case of hepatitis associated with acute hemolytic anemia from methyl alcohol poisoning is reported. This condition responded well to the administration of cortisone and blood transfusion.

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The Surgical Treatment of
CORONARY ARTERY INSUFFICIENCY

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Coronary thrombosis kills at least 200,000 persons yearly in the United States and cripples unknown thousands.[1] This figure has increased steadily with the increase in population and life expectancy. The incidence of death from this cause is one-third higher in professional men, including doctors, than in the general population. We physicians should have a personal interest in curbing this disease.

Results following treatment of the acute myocardial infarction are improving. Yet 45 per cent of patients with myocardial infarction are dead in five years, and the average life expectancy is estimated at seven or eight years. Only 15 to 20 per cent die following the first attack, but nearly every patient eventually dies of coronary artery insufficiency or myocardial infarction. It is not enough that we physicians help these patients survive the first attack; we must also do all we can to help them live a longer, more active life with their disease.

The general methods of treating this condition have not changed greatly in the last few years. Many authorities believe that the use of anticoagulants has decreased the death rate immediately following a myocardial infarction.[1, 2, 3] They think that the use of anticoagulants has definitely decreased the incidence of thromboembolic complications. I^{131} is useful for rendering these patients hypothyroid and thereby decrease the oxygen need of the myocardium. It has a very definite place in the treatment of heart disease.[4, 5, 6] Surgical operations by increasing the total blood supply to the heart and by establishing greater intercoronary arterial anastomosis, on the other hand, also offers a great deal to these patients.[7, 8, 9, 10, 11, 12, 13]

Thus, anticoagulants may guard against subsequent thrombosis but will not increase the blood supply to the heart. I^{131} will decrease the need for oxygen but will not increase the blood supply to the myocardium or protect against subsequent infarction. Only a surgical operation will increase the blood supply to the myocardium and protect against further infarction. All three of these methods may be used together, as their actions are different and complementary.

The surgical treatment of coronary artery disease began in the experimental laboratories in 1932. It has made steady progress, until now it has reached a place of importance.[14] More than 80 per cent of these patients can be helped by a surgical operation; the mortality is about five per cent.[7, 9, 12] The work in the laboratories continues.[15, 16, 17] Many hundreds of human beings have been benefited by surgical procedures. The benefits derived from these operations are fundamentally two: First, it is possible to decrease the pain and to increase the activity of the patients. Second, the life expectancy of these patients is increased by protecting them against subsequent coronary artery occlusion through the development of intercoronary arterial anastomosis.

Types of Death

Two types of death follow a coronary artery occlusion. One will be called trigger mechanism death, and the other will be called muscle death.[7, 8] In death of the mechanism type, the patient has an occlusion of one of the smaller branches of a coronary artery. The occlusion produces a small area of ischemia or infarction. This outside focus is potentially capable of sending out impulses that in turn destroy the normal mechanism. The myocardium becomes convulsive, the heart pumps no blood, and the patient dies. In these patients, the myocardium may be

normal except for this small area of ischemia. Surgical operation can do much to help this patient.

Muscle death is caused not by a sudden occlusion but by a gradual, progressive occlusion of the coronary circulation. There is decreased blood supply to the entire myocardium. The muscle gradually dies and is replaced by fibrous connective tissue. The myocardium can no longer carry on its work. The heart dilates and fails, and the patient dies. This patient may be helped by a surgical operation. The extent of help will depend upon the condition of the myocardium at the time an operation is proposed. Obviously, these operative procedures cannot restore the destroyed myocardium.

Surgical Methods of Improving The Coronary Circulation

The coronary circulation should be considered on the basis of (1) the total inflow and (2) the distribution of the blood entering the coronary circulation.

The heart can maintain function on a small fraction of the normal total blood flow, provided the distribution of the blood is adequate. This point has been demonstrated in the experimental animal by almost totally occluding a main coronary artery by means of a ligature without causing a cardiac death. In a number of hearts, all the coronary inflow has been occluded and in many human hearts a hair-like lumen has been found in the major coronary arteries, without producing cardiac death. On the other hand, if the total inflow is adequate but the distribution is not—that is, if an area of ischemia suddenly occurs—this may cause a mechanism death.

The problem, then, is not only to increase the inflow but also, and more important, to assure an equal and adequate distribution of the blood to the myocardium. The role of the intercoronary arterial circulation comes into play in the distribution of blood. Unfortunately, as you know, most of the coronary arteries are end arteries, and there are few if any anastomotic branches between the main branches of the coronary arteries.

The methods used to improve the coronary circulation are: (1) Addition of blood from outside sources, and (2) rationing the coronary blood in short supply; that is, further developing intercoronary arterial anastomosis.

There are three methods of producing an increased blood supply. The first is producing an anastomosis from outside sources to the capillary bed of the myocardium. An example is the poudrage operation of putting talc or asbestos into the pericardial sac. The second is producing an anastomosis from outside sources to the coronary arteries themselves. The internal mammary implantation is an example. The third method is directing blood from outside sources through the venous system and thus redirecting blood in a retrograde flow. This is accomplished by the arterialization of the coronary sinus.

Rationing the coronary blood supply must be done through the intercoronary circulation—that is, by stimulating the formation of anastomotic arterial branches between the coronary arteries. It is done in three ways: (1) by ischemia, (2) by increasing the arterial pressure in the coronary system, (3) by diffuse anastomosis into the capillary bed of the myocardium. It has been shown both in experimental animals and in human beings that an ischemic myocardium will produce within itself anastomotic coronary arteries. This very fact increases the efficiency of these operative procedures in patients with actual coronary artery insufficiency. An example is an ischemic myocardium.

Increasing coronary artery pressure can be accomplished in three ways. The first is by introducing blood from the systemic circulation under pressure into the coronary circulation. Such increased coronary pressure is produced by implantation of the internal mammary artery or by arterialization of the coronary sinus. The second is by occluding the venous return, thus increasing the pressure within the coronary system. Partial or complete ligation of the coronary sinus is an example. The third is a combination of these two methods. The Beck II procedure is such an example.

Diffuse anastomosis into the capillary bed of the myocardium is produced by poudrage or, to a lesser extent, by grafting procedures.

Methods of Study

There are three methods of measuring the usefulness of a given operative procedure. One method is by the ligation of a coronary

artery and measurement of the infarcts and mortality produced; another is the backflow method, as developed by Mautz and Gregg:[18] and the last is by clinical evaluation or exercise tests.

In the first method, a selected protective operative procedure is carried out. A major coronary vessel is later occluded. If the animal dies, the size of the infarct produced is measured. If he lives, the animal is sacrificed after a given length of time, and the infarcted area is measured. Let us say, for example, that in a control group of animals, ligation of the circumflex branch of the left coronary artery causes death in 70 per cent of the animals and the infarct averages 4x2 cm. after a protective operation, the mortality following ligation is reduced to 20 per cent; infarcts, in the fatalities, are reduced to 2x1 cm. One can assume from these results that the operation is of benefit.

The backflow method is simply a measurement of the backflow from the distal end of a divided coronary artery in an experimental animal. For instance, one can obtain a base line by ligating the circumflex branch or the descending ramus of the left coronary artery, dividing it and measuring the backflow of the blood coming from the distal end of the severed artery in a normal dog. Since the coronary is an end artery and blood coming from the distal end represents flow from intercoronary anastomoses, any increase shows further formation of anastomoses. After a base line is obtained, an operative procedure is applied and the blood flow through the distal end of a severed coronary artery is measured: The increased flow represents the increase in intercoronary anastomosis.

Other clinical methods of evaluation are electrocardiograms, exercise tolerance tests and longevity of the patient following the operation. When the hearts are available after these operations, the coronary system may be injected with barium paste or Schlesinger's solution, and the anastomosis outlined by photograph or by roentgen ray.

Operative Procedures

Several types of operative procedures will be discussed. They are: (1) poudrage procedures with or without abrasion, (2) grafts, (3) sympathectomy or pericoronary neurectomy, (4) coronary sinus ligation, (5) arterial implants, and (6) arterialization of the coronary sinus.

The Beck I procedure is a combination of these methods.[9, 10] It is a poudrage procedure using asbestos and abrasion of the epicardium, partial ligation of the coronary sinus, and grafting of the parietal pericardium and mediastinal fat to the heart surface. The Beck II operation produces an anastomosis between the aorta and the coronary sinus, either directly or by means of a vein graft. This procedure is followed, at a second stage, by partial ligation of the coronary sinus.[19, 20]

The Vineberg procedure consists of implanting the internal mammary artery into the left ventricular myocardium. Together with this implantation is grafting of fat and pericardium on the surface of the heart.[21, 22] A simple poudrage operation using talc is carried out by Thompson.[23] Talc plus abrasion is used by Mazel.[24] The grafting of the small bowel to the surface of the heart through the diaphragm has been accomplished in the experimental animal.

In the sham operation, the heart was simply exposed by thoracotomy, the pericardium opened and closed, and nothing more done. This operation is simply to show the effects on the coronary circulation of such a procedure.[11] The operation of a sympathectomy or pericoronary neurectomy as proposed by Fauteaux is simply cutting the autonomic nerve supply to the coronary circulation. It has been done with and without partial coronary sinus ligation.[25]

Evaluation of Operations

The Beck I procedure is relatively simple. It has a low mortality and is of consistent benefit to the patient. Experimental animals when measured by the backflow method, showed an increase in average backflow of from 3.8 to 8.9 cubic cm. a minute, or an average increase of 5.1 cubic cm. a minute. Measured by the ligation-mortality-infarct tests, the mortality was reduced from 70 per cent in the control group to 30 per cent in the group having the Beck I procedure. The infarcts were consistently reduced.

The Beck II procedure increased the backflow from 3.8 cubic cm. a minute to 13.7 cubic cm. a minute, or an average of 10.9 cubic cm. a minute. The mortality after ligation of

the circumflex branch of the coronary artery was reduced to zero after a Beck II procedure, as compared to a 70 per cent mortality in the control group.[11, 12, 26, 27, 28, 29]

Obviously then, the effect of the Beck II procedure is greater than that of the Beck I. However, the mortality in the Beck II procedure is around 25 per cent and the morbidity is much greater. This procedure, because of its greater risk and magnitude, cannot be applied to many patients because they are poor risks. Its range of application is limited. The anastomosis fails to function in a small number of people. In one human heart available for examination, the aortic anastomosis had lost contact with the capillary bed. However, the intercoronary arterial anastomosis had already been well established before contact was lost. Intimal thickening of the vein wall accounts for these occlusions. All in all, the Beck I procedure is preferred.

The simple poudrage procedure as proposed by Doctor Thompson[23, 30] has in its favor simplicity, wide application and very low risk. Backflow studies show an average increase in the experimental animal of 1 cubic cm. a minute. This rate can be increased by adding abrasion of the myocardium, ligation of the coronary sinus, or both. When these procedures are added, the backflow will increase to nearly 5 cubic cm. a minute. Clinical evidence covering a 14 year period and 57 patients shows that the patients have been definitely improved and that nearly all of their lives have been prolonged.

Implanting the internal mammary artery into the left ventricular myocardium as proposed by Vineberg is a procedure which increases the inflow of blood into the myocardium and also increases the pressure in the coronary system. One of the great disadvantages is that at best only 75 per cent of the implanted vessels remain functional. In experiments, only 50 per cent of the animals developing an anastomosis survive after ligation of the descending branch of the left coronary artery.[21, 31, 33, 32, 34] In experimentally produced coronary insufficiency, an internal mammary implantation will return the exercise tolerance to normal. Ligation of the implanted artery will then cause the death of the animal. Implantation of the internal mammary artery offers protection in direct proportion to the size and extent of the anastomosis. The obvious drawbacks to this procedure are, first, that it is technically difficult; second, that it has a higher mortality and morbidity, and, last, that it is successful in only about 40 per cent of the experimental animals.

A sham operation on the heart is one in which the heart is exposed to the trauma of an operation but no actual operation is done. Backflow studies, after four or five weeks, show an increase following these operations. This operation simply shows that trauma incidental to any operation on the heart increases the intercoronary anastomosis.[11, 12] Sympathectomy or pericoronary neurectomy produces no change in coronary backflow and apparently offers no increased protection to the patient. There is insufficient evidence to truly evaluate the operation of pericoronary neurectomy.[11, 25]

All operative procedures are more beneficial in the presence of coronary insufficiency. Myocardial ischemia stimulates intercoronary arterial anastomosis.

Operative Results

The Beck I procedure helped 84.8 per cent of the operated patients. Of this group, 36.3 per cent experienced no pain and were back to useful occupations, and 48.5 per cent were definitely better. The remaining 15.2 per cent were either not improved or were worse. As of October 1, 1954, the over-all mortality was less than four per cent in Beck's series of cases. There had been no mortality among the last 28 patients.[11, 35]

With the Beck II procedure, 88.4 per cent were improved. Of these patients, 39.6 per cent had no pain, 41.9 per cent worked with no limitations, 37.2 per cent worked with limitations, and 48.8 per cent had less pain. Only 11.6 per cent were unimproved or worse. The over-all mortality in this group was 26.1 per cent. However, the mortality in the year 1954 was somewhat reduced.[11]

A 14 year follow up study of patients receiving the operation designed by Thompson showed a mortality of slightly more than 12 per cent.[23, 30] Thirty-three patients, or 66 per cent, are now living. The youngest patient in the group is 35 years old. The oldest 68; the average age is 61. Most of the patients were

in the sixth decade. Three of the patients were in congestive failure; seven had hypertensive heart disease. The shortest length of life following the operation was two months, the longest is now more than 14 years. An average span of more than five years followed the operative procedures. However 33 of the patients are still living; therefore the life expectancy will undoubtedly increase as time goes on. The average duration of symptoms before the operation was four and one half years. The average life span after the operation was five years. Thus the span of life of these patients, from the first symptoms, was nine and one half years, definitely an increase over that of the average coronary patient not receiving the operation. It is estimated that 90 per cent of these patients were improved somewhat and that 40 per cent were greatly improved.

A similar procedure has been carried out by Mazel and associates, et al, on 53 patients in the last four years; they say that the mortality is almost nil.[24] Recent figures on the Vineberg implantation procedure show an over-all mortality of 14 per cent in 29 patients. Sixty per cent are free from pain, and 73 per cent have returned to work.[34]

Selecting Patients

All patients should be individually evaluated. The most acceptable patient for the operation is a lean person in his forties or fifties who has had the disease for a year or more, and who has pain but can still get around. He must have serious impairment of his coronary arterial flow.

No patient is accepted if he has had a known infarct within the past six months. Patients with heart failure or with progressively enlarging hearts are not acceptable for operation. A patient with a moderately enlarged heart who has stabilized and who has no failure may be acceptable. Patients with status anginosus are acceptable. They are often a greater operative risk than the patients with a history of a coronary infarct. While there is no age limit in selecting patients for this operation, patients more than 60 years of age or patients who had more than two myocardial infarctions offer a great surgical risk. Young patients who have rapidly progressive disease may have a poor result.

In addition, any associated condition, general or specific, which might influence the operative survival or rehabilitation in a specific case, must be weighed on its own merits. Among them are emphysema, bronchiectasis and diabetes.

Discussion

These operative procedures accomplish two things: They increase activity and decrease pain in a large majority of patients, and they increase life expectancy by protecting patients against further coronary occlusion.

The increase in total inflow is not as important as the distribution of the blood throughout the myocardium. The patient can be kept alive by a very small increase in blood flow if it is correctly distributed. An increase of 1 cm. a minute of backflow from the circumflex branch of the left coronary represents the difference between life and death. In a patient with coronary insufficiency, the effectiveness of the operation is greatly enhanced by the low coronary pressure and the myocardial ischemia. An operation which will increase the coronary backflow 0.8 to 1 cubic cm. a minute in an experimental animal will adequately protect the patient with coronary disease.

The described procedures, if properly done, all offer adequate protection to the patient. One must weigh the protection offered by any given procedure against the risk in any given patient and then decide as to the usefulness of the procedure. Obviously, in the poor risk patient, one may elect the simpler procedure even though the protection offered may be less. One must realize that the poudrage operations with or without grafts, epicardial abrasion and coronary sinus ligation, can be done with a mortality of about five per cent. The benefit and mortality will both depend entirely upon the group of patients selected.

In selecting patients for these procedures, one must evaluate each patient even though a set of criteria has been suggested. As time continues these criteria will change. Certainly these procedures are not ones to be used for prophylaxis. They should be used only on proved cases of coronary insufficiency. These operations cannot restore dead

or replaced myocardium. They cannot stop the progress of the disease within the coronary vessels.

Summary and Conclusions

1. The rationale of applying surgical operations in the treatment of coronary artery insufficiency is discussed.
2. Methods of improving the coronary circulation by application of surgical procedures are shown.
3. The methods of measuring the beneficial results of such operative procedures are described.
4. Several operative procedures are discussed and evaluated.
5. The operative results are shown.
6. Criteria for selecting patients are laid down.
7. The final conclusions are:
   a. More than 80 per cent of patients acceptable for operation can be helped.
   b. If both patient and operative procedure are properly selected, the mortality will be about five per cent.
   c. Patients cannot only be made more comfortable and useful but can be protected against subsequent coronary occlusion.
   d. Only patients with coronary insufficiency are acceptable. These procedures are not acceptable for prophylaxis.

Bibliography in full appears in the author's reprints.

An Improved Asepto
SYRINGE *For* BLADDER IRRIGATION

S. D. NEELY, M.D., and E. M. HENRY, M.D.

THE AUTHORS

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On numerous occasions we have been faced with the perplexing problem of removing foreign material, particularly blood clot from the bladder without having to subject the patient to anesthesia and manually removing it through a rigid instrument. The Toomey type syringe is quite expensive, around $9.50 each for a 50cc size. It is ground glass and if you break either part, it must be replaced with a new one. The metal tip also becomes dislodged at times. The disadvantage of the Ellik evacuator is that its tip is too large to use on the ordinary catheter. This evacuator we know was made to fit a resectoscope sheath.

We began experimenting with the two ounce Asepto Syringe made by Becton, Dickinson and Company. This regular syringe tip is too small to carry many blood clots. We tried filing this tip off and it worked much better.



Syringe A has had tip cut off. Syringe B is regular Asepto-2 ounce syringe.

We contacted the research department at Becton, Dickinson and Company and Mr. Oscar O. R. Schwidetzky was kind enough to make us up a syringe with a larger calibred point. We found that this syringe works very well or better than any other available at this time. Mr. Schwidetzky says this syringe is available now as "Asepto Syringe No. 2082" special, with Neely point. We use this syringe exclusively now in bladder irrigation. Naturally, the glass barrel and the syringe must make good contact and the rubber bulb must be of good quality. Comparing the price, this syringe is available at $18.00 a dozen. We can recommend this syringe as being the most practical method of removing foreign material from the bladder through any type catheter.

The Conservative Treatment of ESOPHAGEAL OBSTRUCTION

Due to Meat Impaction

CHARLES K. HOLLAND, M.D. and ALLEN E. GREER, M.D.

Obstruction of the esophagus as a result of the impaction of meat is a relatively rare condition. However, it is common enough so that most physicians will see it sooner or later. The accepted method of treating this condition has been the passage of an esophagoscope, through which the meat is removed. This method requires a topical anesthetic and in some cases a general anesthetic, is a highly specialized procedure, and is not without danger. The mortality rate has been quoted at about one per cent. We wish to call attention to a simple method for removing these meat impactions which is effective, harmless, and may be carried out by any physician.

Meat impaction in the esophagus is seen most commonly in elderly individuals who are edentulous or wearing dental plates and in persons who have pathologic narrowing of the esophagus. As you all know, the normal esophagus has three points of physiologic narrowing, at the cricoid cartilage, at the level of the aortic arch, and at the point where the esophagus pierces the diaphragm. Obstruction usually occurs at one of these points.

The usual history obtained from these patients is that while eating they suddenly had a sensation of food lodging in the esophagus and have been unable to swallow solids or liquids without regurgitation. They are usually able to localize the site of obstruction fairly accurately. Most of them are seen within a few hours after the obstruction occurs; most of them have comparatively little pain but complain simply of being unable to swallow. However, if a great many hours or days have elapsed since the obstruction began, the patients may present a pitiful appearance of dehydration, severe pain on attempting to swallow, and exhaustion from lack of sleep and retching. Removing the meat impaction is desirable, although if no attempts are made to remove the meat, it will eventually putrify and pass spontaneously. However, from seven to 15 days are required for this to occur, and the mortality rate is exceedingly high because of secondary infection, mediastinitis, perforation of the esophagus, etc.

THE AUTHORS

Allen E. Greer, M.D., Oklahoma City, and Charles K. Holland, M.D., McAlester, are co-authors of The Conservative Treatment of Esophageal Obstruction Due to Meat Impaction. Doctor Holland graduated from Vanderbilt University and his specialty is internal medicine. Doctor Greer graduated from the University of Oklahoma School of Medicine and specializes in general and thoracic surgery.

Diagnosis of esophageal obstruction is established by radiologic examination. A small quantity of barium is all that is needed. It will not discomfort the patient except that it may cause coughing if the point of obstruction is near the cricoid. But even if such coughing occurs there will be no difficulty in establishing the diagnosis. Roentgenogram is essential also to rule out the presence of bone in the area of obstruction. Any bone should be removed through the esophagoscope since perforation of the esophagus or lower gastrointestinal tract may occur with conservative treatment.

The first report of using proteolytic enzymes administered by mouth on the impacted meat was by Richardson in 1945. He relieved the obstruction in 16 of 17 patients using caroid solution. The 17th patient was a failure because she could not retain the solution.

We wish to present a series of eight patients treated with proteolytic enzymes with successful relief of the obstruction in all patients.

Report of Cases

1. A white man, age 85, swallowed a large portion of chicken on August 16, 1951, and thereafter was unable to swallow solids or liquids. He was certain there were no bones

present as he had removed the chicken meat from the bone with his fingers. The patient localized the site of difficulty in the low retrosternal area. After a barium esophagram revealed a complete obstruction in the distal esophagus, his physician unsuccessfully tried to force the food bolus through the cardia by passing a large stomach tube.

The patient was admitted to the hospital four days after the onset of difficulty. Examination was of little aid, but the patient did show Parkinsonism, marked arthritis, and moderate obesity. He was edentulous.

On August 20, 1951, an esophagoscopy was performed under topical anesthesia; performing it was moderately difficult because of the immobility of the neck associated with cervical arthritis. The food bolus was visualized, and about one ounce was removed piecemeal.

The following day, a second attempt was made with the patient under general anesthesia. With the aid of consultation with another endoscopist, about the same amount of meat was again removed piecemeal.

On August 22, 1951, a physical examination revealed a right hydropneumothorax. This finding was verified by roentgenograms, and a lipiodol swallow showed a perforation of the esophagus just above the remainder of the meat bolus. Because of the patient's age and general debility, and because the family did not wish a major surgical procedure to be performed, conservative measures were carried out. They included thoracentesis, instillation of antibiotics in the chest, parenteral administration of penicillin and streptomycin, and finally the insertion of a chest tube in the right pleural space for constant drainage.

On August 27, 1951, Essence of Caroid was given in teaspoonful doses every 15 minutes for eight doses. The meat bolus disappeared, the lung re-expanded, and the perforation healed. The patient was discharged recovered.

This case illustrates the difficulty sometimes encountered in removing the meat impactions through an esophagoscope and the complications that may occur. It was this case that prompted us to try caroid solution as an easier method of removal.

2. A 77-year-old white man who was admitted to the hospital on August 22, 1952, said that he had developed esophageal obstruction 16 hours prior to admission. While he was eating roast beef without his dental plates, he felt something stick in his esophagus near the xyphoid. Since then he had been unable to swallow solids or liquids, and for the previous 12 hours he had been very uncomfortable on attempting to swallow. Barium swallow revealed complete obstruction of the esophagus near the diaphragm; there was no bone present and no dilatation of the esophagus above the obstruction. The patient was given Essence of Caroid, 4 cc., every 15 minutes. After receiving five doses, the patient regurgitated a portion of the meat. He was immediately relieved and two hours later was able to eat a soft diet without difficulty. Subsequent barium swallow revealed no abnormality of the esophagus. See illustration case 2.)

3. A 68-year-old white man, admitted to the hospital on April 7, 1953, had been unable to swallow solids or liquids since eating a pork sandwich 24 hours before admission. He complained of very little pain but had regurgitated all food and various medications taken during the previous 24 hours. The patient was edentulous. Barium swallow revealed complete obstruction of the esophagus at the junction of the middle and distal one-third but no dilatation of the esophagus above this level and no bone present. No caroid solution was available at this time, so the patient was given a solution of acidulated pepsin, 4 cc., every four hours. After five doses, the patient's obstruction was relieved, and he was able to take food and liquids without difficulty. Repeat barium swallow disclosed no abnormality of the esophagus.

4. A 50-year-old white man who was admitted to the hospital on December 6, 1953, had been unable to swallow food or liquids for the previous three hours. While he was eating steak, a bolus seemed to lodge at the level of the xyphoid. He tried to continue eating but the food would not pass, and after a few more mouthfuls he regurgitated undigested food. He had tried drinking water and various other liquids, but each time he regurgitated within a few minutes. At the time he was seen, he was having no pain ex-



A and B. Photograph of meat digestion by Caroid solution: A after 1 hour of digestion and B after 2 hours of digestion. Tube 1 is control with coarsely ground beef in water, tube 2 contains 1½ grains of Caroid, tube 3 contains 5 grains of Caroid, tube 4 contains 10 grains Caroid and tube 5 contains 15 grains Caroid.

A B

Note more complete digestion of meat with greater amounts of Caroid.

cept mild discomfort when he tried to drink water. The patient said that about two years before he had had a similar attack which subsided spontaneously after three hours. He said that he had had some difficulty in swallowing solid foods for the past five or six years. Barium swallow revealed complete obstruction at the lower end of the esophagus. No bone was present, and there was no dilatation of the esophagus above this region. Essence of Caroid, 4 cc., was given every 15 minutes. After 45 minutes, the patient experienced relief and was able to drink liquids. The following day repeat barium swallow revealed a normal esophagus except for a smooth, slight narrowing at the level of the diaphragm.

5. A white woman, a sanatorium attendant age 51, accidentally swallowed a large portion of unchewed roast beef. It caused immediate discomfort in the mid retrosternal area and inability to swallow liquids or solids. She made several unsuccessful attempts to induce vomiting.

Physical examination was of little aid as no positive findings were elicited. The patient wore a partial denture.

Essence of Caroid was given in doses of one teaspoonful every half hour. The patient felt considerable discomfort during this time, but was completely relieved after several doses. She said that she could feel the meat bolus slip through and at this time noted a dull type of pain.

Subsequent barium studies were normal.

6. A 60-year-old white woman had had a piece of roast beef stuck in her esophagus for an hour before she was admitted to the hospital on April 9, 1954. Since then, she had regurgitated all foods and liquids. She complained of a sense of constriction beneath her lower sternum but was not in acute distress. She wore dentures. Barium swallow revealed complete obstruction of the esophagus just above the diaphragm; no bone was present, and there was no dilatation of the esophagus above the point of obstruction. Essence of Caroid solution, 4 cc., was given every 15 minutes. After four doses of this medication, the patient suddenly regurgitated



CASE 2



CASE 8

Case 2. Esophagram showing almost complete obstruction with particles of food in lower ⅓ of esophagus. A normal esophagus was demonstrated after relief of the obstruction.

Case 8. Esophagram shows complete obstruction just above the diaphragm. Follow up film after obstruction relieved shows normal esophagus with large hiatus hernia.

two large pieces of meat and thereafter had no difficulty swallowing. Barium swallow on the following day disclosed no abnormalities.

7. A white boy, age two and one-half years, was first known to have a congenital stricture of the esophagus when he was 15 months old. Subsequent dilatations were effective, but there persisted a localized narrowing through which a size 34 F. mercury weighted bougie could be passed.

On April 17, 1955, the boy swallowed a portion of a frankfurter which lodged above the area of slight stenosis. He felt some discomfort, and he was unable to retain even small amounts of water.

No roentgenograms were made as the nature of food ingested was known. Essence of Caroid gave relief after the fourth dose (15 minute intervals between doses). No ill effect was noted following this episode.

8. A white man, age 61 years, was admitted to the hospital because of choking on a piece of meat. He had had a history of intermittent dysphagia for three years and some indigestion. The latter was characterized by retroxyphoid discomfort and eructations relieved by soda. He had occasionally had tarry stools. On August 8, 1954 he choked on a portion of steak and thereafter had a deep seated sensation of discomfort in the lower thorax, with nausea and vomiting. The vomiting yielded blood and blood-streaked mucus. On two previous occasions food had seemed to stop in the same area but had passed on through after a time. In addition to these symptoms, he very often had to wash food down with liquids.

Physical examination revealed an obese, edentulous man of middle age. Nothing else of aid was found on examination.

A barium swallow showed a complete obstruction of the esophagus in the distal one-third.

After several doses of Essence of Caroid, the patient vomited up a large bolus of meat, which had a very slick outer surface.

A barium swallow on the following day showed a moderate sized hiatus hernia. The patient was discharged from the hospital asymptomatic. The recurrent digestive complaints were considered due to the hiatus hernia, but surgical correction was declined by the patient. (See illustration case 8, 1 and 2.)

Discussion

The active ingredient of caroid is papain, a grayish-white powder derived from the green fruit of the tropical Carica papaya tree. Papain possesses powerful proteolytic enzymes which are able to digest from 35 to 100 times its weight of lean meat. The enzyme is readily soluble in glycerine, alcohol or water. It is active in acid, neutral, and alkaline media equally and therefore has a distinct advantage over pepsin, a weaker proteolytic enzyme which requires a strongly acid medium. Papain is used extensively industrially in meat tenderizers, in the tanning industry, and in making chewing gum. It is produced medically by the American Ferment Company under the trade name "caroid." Various caroid preparations are available and have been used extensively for many years in medicine as Alcaroid powder, which is caroid added to a mixture of anti-acids, and caroid and bile salts, which we are sure is familiar to all. Essence of Caroid is a stable, aqueous - glycerine - alcohol solution containing one and one-half grains of caroid powder per dram. Caroid powder is available and is a more stable preparation than the elixir.

In years past, papain preparations have been used extensively in medicine for treating various types of indigestion, for local application on wounds and burns to digest off the non-viable tissue and for local application to the peritoneal cavity in abdominal operations to prevent the formation of adhesions. These uses have been largely abandoned, but it has been well established that almost no toxic effects are related to the use of papain. It will not digest living tissue and has been found entirely harmless when taken orally in large amounts.

The dose we have used is four cc. of the caroid solution which contains 1.5 grains of papain administered every 15 minutes. If larger does of caroid powder are used, such as five to 15 grains administered in 5-10 cc. of liquid, faster digestion of the meat is expected. Complete digestion of meat is not necessary to relieve esophageal obstruction, as the meat softens on the outer surface, becomes slick, and passes on through.

A word of caution should be given concerning the potency of caroid preparations. Since they lose potency after several weeks or months, most of the enzymetic action may be lost if one uses a preparation that has been on the druggist's shelf for a year or more. Liquid preparations are more unstable than the powder. Practically all meat tenderizer powders sold in grocery stores contain papain and may be administered by mouth if caroid is not available. (See illustrations A and B.)

Summary

A simple and safe method for removing meat impactions in the esophagus obviates the need for esophagoscopy and instrumental removal of the meat. Although this method was reported in literature 10 years ago, it is not being used as extensively as we believe it should be. This simple method consists of the oral administration of caroid, a powerful proteolytic enzyme, in small quantities at 15 minute intervals.

All of our patients obtained prompt relief, and there were no complications. Roentgenogram examinations of these patients is important, both to establish the diagnosis and to rule out the presence of bone in the obstruction. It is also important to re-examine these patients with a barium swallow after the obstruction is relieved to rule out any associated pathologic condition. Esophagoscopy should be carried out in patients who continue to have dysphagia subsequently, although the esophagram appears normal.

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STANDARD DEVIATION

(Continued from Page 70)

Hospital I's standard deviation was .4 per cent and Hospital II's was .2 per cent. The square of .4 per cent is .16 per cent and the square of .2 per cent is .04 per cent. These are then added to give a total of .2 per cent. Reverting back to the original figures the square root of this is approximately .45 per per cent. Subtracting Hospital II from Hospital I (8.5 per cent — 7.9 per cent) we see a difference of .6 per cent. Since this is not two times as great as the .45 per cent standard deviation for the two hospitals combined, the variation in these two hospitals could be due to chance alone and not to better treatment.

All too frequently we read an article in which a physician reporting and advocating a certain treatment for a malady states he treated 150 patients and had a survival rate of 20 per cent. He then blows his method of treatment up as being much better than another physican's method because the other had only a 15 per cent survival rate. (The author inadvertently failed to give the number of the latter's cases.)

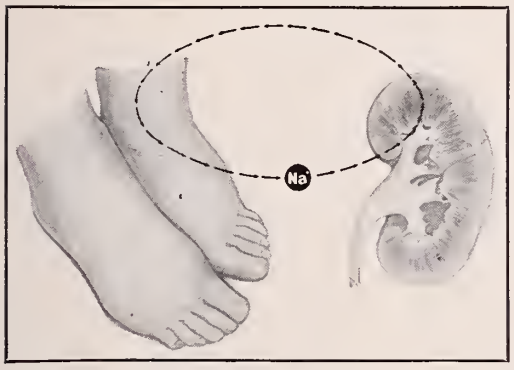
But you still have him stumped—you don't always need the other physician's number of cases to compare efficacy of the methods. Simply use this formula: 150 cases x 20 per cent = 30 cases that survived. The square root of 30 is 5.5. Now the survival rate of 20 per cent divided by 5.5 per cent is 3.5 per cent, which is the standard deviation. The author's survival rate was 20 per cent and the other physician's was 15 per cent or a difference of five per cent. However, two times the standard deviation of 3.5 per cent = 7.0 per cent. For the author's method to be the result of a better method of treatment rather than due to chance, he would have had to exhibit more than a seven per cent difference.

If all medical readers would do these fairly fast and not too complicated calculations (a slide rule is not necessary—just a quick brush up on square root), the value of our medical articles would improve by forcing the investigator into being more careful to re-check before he makes a positive statement. A positive statement cannot be made from statistics—just a probable statement. —T.C.P.

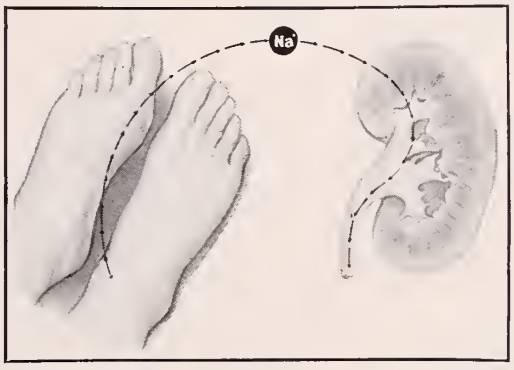
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The maintenance dosage of Mictine, as well as for initial diuresis in mild or moderate congestive heart failure, is one to four 200-mg. tablets daily in divided doses; the dosage for initial diuresis in severe congestive failure, under the conditions already described, is four to six tablets daily. For either use, it is recommended that Mictine be prescribed with meals on interrupted dosage schedules; that is, prescribing Mictine on alternate days or for three consecutive days and omitting it the next four days.

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Association Activities



PRESIDENT'S LETTER

If you have not read current proposed legislation in Congress, especially HR-7225, now in the Ways and Means Committee of the Senate, you, every citizen, should familiarize yourselves with the projected amendments to the present Social Security System. HR-7225, among other things, proposed two amendments, namely, the lowering of retiring age of women from 65 to 62 and Disability Benefits to any person who, at the age of 50 or above, can get any physician to declare him totally and permanently disabled. This disability benefit is full coverage from there on unless and until the Social Security Administration can prove that he is not disabled.

The Ways and Means Committee of the House passed HR-7225 without hearings, to the floor of the House. The House passed, in its entirety, HR-7225 with only 31 dissenting votes. This was done with very limited debate in the House. Such speedy action is not by any yardstick conducive to good legislation.

The Finance Committee of the Senate is hearing representatives of professional, and vocational and business organizations on these proposed amendments. Last Thursday Doctor Malcolm Phelps and I, along with representatives of nine other State Medical Associations, testified before this Committee.

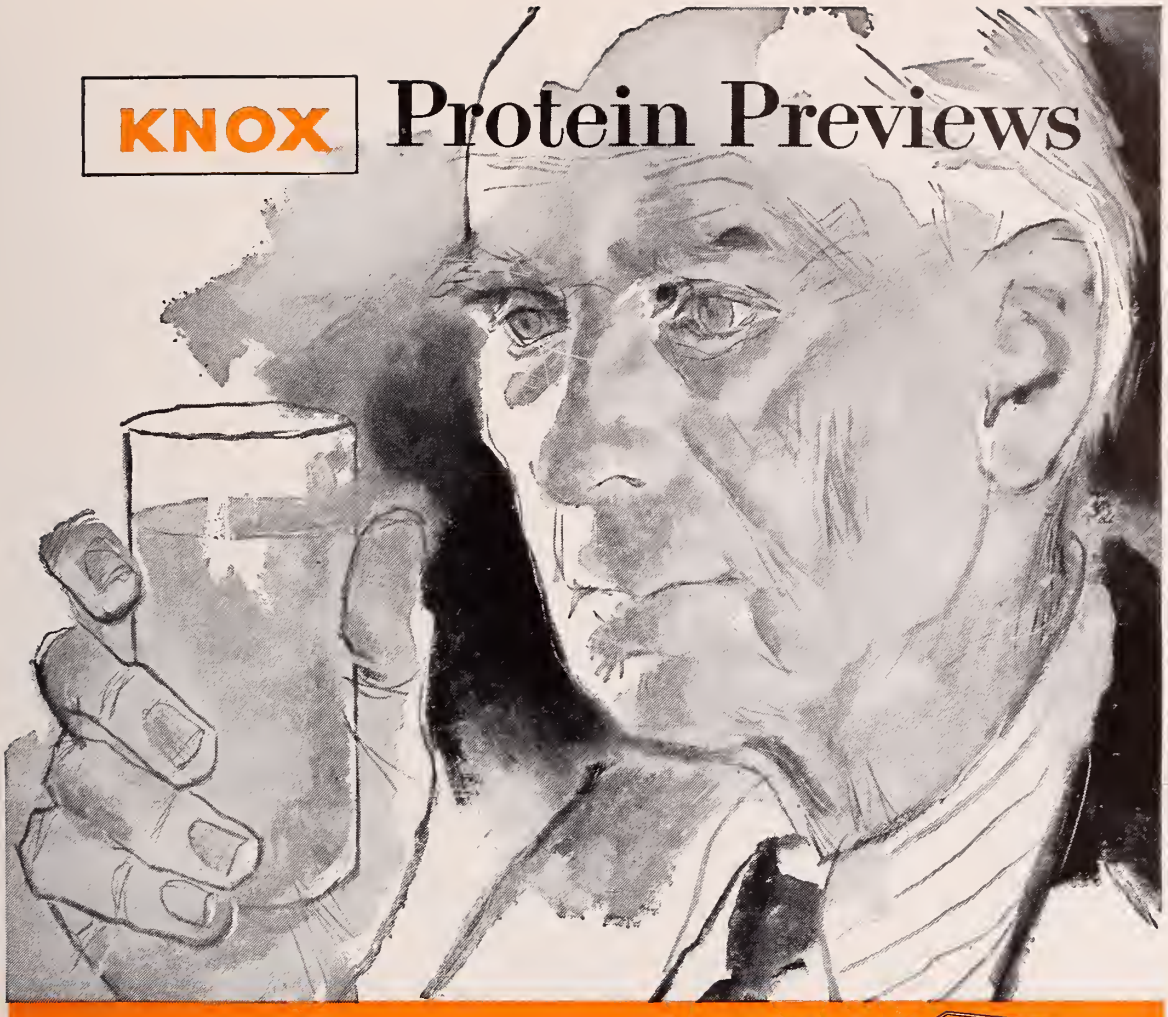
Never has the writer seen nine men in any profession or vocation individually and collectively make and hold a line of defense against the bombardment of senatorial questions so well. Never has the writer been so proud of any group of doctors. It was heartening and the over-all reception was most excellent.

This observation was been presented with the hope that you will study the provisions in HR-7225. If you do, you will not have to be asked to do something about this far reaching legislation—legislation that will breed dishonesty, take away incentive, foster indolence, and probably break down the whole current Social Security System by its own tax burden. It is time that we, as citizens, do something that will preserve some rights and privileges as taxpayers.

R. L. Goodwin

President

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ANNOUNCEMENTS

Oklahoma Stote Medicol Associotion
Annual Meeting, May 6, 7, 8, 9. Municipal Auditorium, Oklahoma City.

American Medical Association
Chicago, Ill., June 11-15. Complete details appear in each issue of the *J.A.M.A.*

Third Notionol Concer Conference
Detroit, Mich., June 4, 5, and 6. Copies of the program and registration cards may be obtained from the National Cancer Conferences Coordinator. American Cancer Society, 521 West 57th St., New York 19, N. Y.

Americon Acodemy of Obstetrics ond Gynecology
Fourth Annual Interim meeting of District VII, Peabody Hotel, Memphis, March 9-10.

Internotionol Acodemy of Proctology
Eighth Annual Convention, Drake Hotel, Chicago, April 23-26. E. Evans Chambers, M.D., Enid, is councilor for Oklahoma. Further details may be had by writing Dr. Alfred J. Cantor, Secretary, International Academy of Proctology, 147-41 Sanford Ave., Flushing 55, N. Y.

American College of Gostroenterology
Southern region meeting Sunday, April 8, New Orleans, Louisiana State University School of Medicine. Copy of the program may be obtained from the Secretary, American College of Gastroenterology, 33 West 60th St., New York 23, N. Y.

Americon Heort Associotion
Annual Scientific Sessions, Cincinnati, Ohio, October 27-October 31, Music Hall. Headquarters hotel will be the Netherlands-Plaza. Those wishing to present papers or scientific exhibits must make application no later than Tuesday, May 15. Application forms may be obtained from the Medical Director, American Heart Association, 44 East 23 St., New York City, N. Y.

American Board of Obstetrics and Gynecology
Next scheduled examinations (Part II) will be conducted at the Edgewater Beach Hotel, Chicago, by the entire Board from May 11 through May 20. Information may be obtained from the Secretary, 2105 Adelbert Road, Cleveland 6, Ohio.

Rural Health Conference Held in Portland, Oregon

"The Doctor's Responsibility in the Physician-Patient Relationship" was the theme of the 11th National Conference on Rural Health held in Portland, Oregon, March 8-10. Representing the Oklahoma State Medical Association were R. C. Emmott, M.D., Stilwell, Chairman of the Rural Health Committee, and Don Blair, Associate Executive Secretary.

Discussions were held on responsibility in over-all community health, getting the patient's cooperation, advising families about physical examinations and community health surveys and their part in family relationships. Mental health and problems of the aged were also discussed along with "Uses and Abuses of Health Insurance" and practical, detailed reports on successful programs carried out in the past year were given.

Oklahoma State Heort Association
Two week course which will give two hours of college credit will be offered at the University School of Medicine May 28 through June 8. Entitled "The Heart Patient," it will be open to 30 applicants. A brochure will be available soon. Complete information may be obtained from the Oklahoma State Heart Association office, 825 N. E. 13th St., Oklahoma City 4, Okla.

General Surgery Short Courses
Offered at the University of Oklahoma School of Medicine April 11 and May 9. April 11 course is entitled "Anticipation and Reduction of Surgical Risk" and "Surgery of the Neck and Oral Cavity" is the title of the May 9 course. Applications for registration should be sent to the Office of Postgraduate Instruction, University of Oklahoma School of Medicine, 801 N. E. 13th, Oklahoma City.

Anesthesiology Short Course
Offered at the University of Oklahoma School of Medicine June 13. Applications should be made to the Postgraduate Office at the Medical School.



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East Central Society Announces Program

The East Central Medical Society has announced the program for the Clinical Meeting of the Society Saturday, April 7, 1956. The subject is the "Acute Abdomen" and sessions will be held in the Auditorium of the Veterans Administration Hospital. All O.S.M.A. members are invited to attend. Maurice C. Gephardt, M.D., is Program Chairman. Program is as follows:

2:00-2:45 p.m.—The Acute Abdomen and the Internist; J. P. Colmore, M.D., Department of Medicine, University of Oklahoma School of Medicine.

2.45-3:30 p.m.—The Acute Abdomen and the Surgeon; Harvey R. Butcher, M.D., Department of Surgery, Washington University School of Medicine, St. Louis, Mo.

3:30-4:15 p.m.—The Acute Abdomen and the Radiologist; Simon Dolin, M.D., Department of Radiology, University of Oklahoma School of Medicine.

4:15-4:30 p.m.—Intermission.

4:30-5:30 p.m.—Presentation of Cases to Stump the Panel.

7:30-8:15 p.m.—Dinner (place to be announced).

8:15—"New Zealand and Socialized Medicine"; Howard C. Hopps, M.D., Professor of Pathology, University of Oklahoma School of Medicine.

Price of the dinner is $5.00 per plate. Reservations should be made in advance with M. C. Gephardt, M.D., Program Chairman, 443 N. 16th St., Muskogee, Oklahoma.

Appointment Reminders

Appointment reminder cards for physicians of Oklahoma are available in packages of 300, through Blue Cross-Blue Shield, according to Carl E. Behle of the Professional Relations Departments.

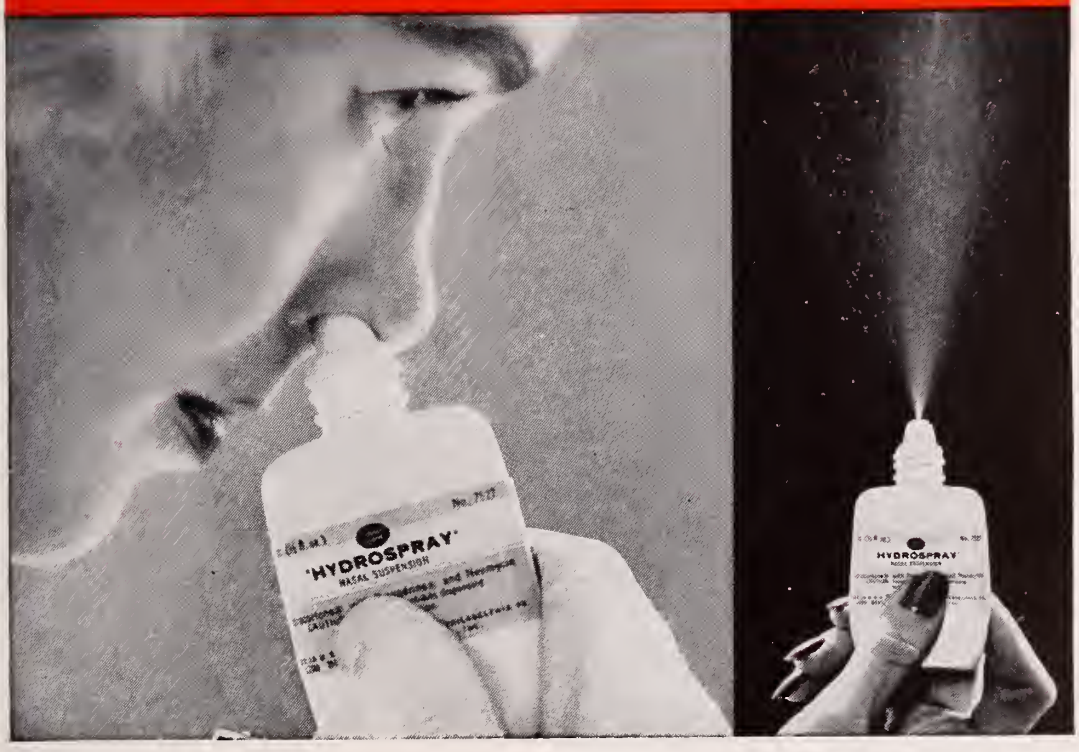
The card, which is billfold size, has space for the patient's name, the date and hour of the appointment and the doctor's name and address. The Blue Cross and Blue Shield emblems are printed on the reverse side.

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REFERENCE: 1. Silcox, L. E., *A.M.A. Arch. Otolaryng.* 60:431, Oct. 1954.

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PHYSICIAN PLACEMENT

The following physicians have expressed a desire to locate in Oklahoma. To the best of our knowledge, the names, addresses, qualifications and availability are current and accurate.

The asterisk beside some names indicates that additional information concerning the physician is available in this office.

Anesthesia

*Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

*Allen J. Alderman, 1104 Lincoln Drive, Great Falls, Mont., age 28, University of Nebraska, 1954, available upon release from active duty, July 1, 1956.

*A. Stanley Bailey, Jr., 250 Highland, Apt. 102, Highland Park 3, Michigan, age 26, University of Oklahoma School of Medicine, now interning at Highland Park Hospital, available July 1, would prefer salaried position.

*Charles Dail Davenport, 814 N. Elm, Hoisington, Kansas, age 30, University of Oklahoma School of Medicine, 1953, veteran, available July, 1956.

*John V. Hume, 931 W. 15, Pueblo, Colo., age 31, University of Colorado 1953, residency in general practice, veteran, availability unknown.

*Elmer D. Peffly, Capt., USAF (MC) Aviation Medical Examiner, 3545th USAF Hospital, Office of the Flight Surgeon, Goodfellow Air Force Base, Texas, age 34, University of Oklahoma School of Medicine, 1953, interned at Wesley Hospital, Oklahoma City, available July, 1956.

*Wilmer G. Sheldon, 32 Williams, S. E., Minneapolis, Minn., age 33, University of Minnesota, 1955, veteran, available upon completion of internship, July, 1956.

Internal Medicine

*C. A. Loughridge, 1107 E. Upsal St., Philadelphia 19, Pa., age 36, College of Physicians and Surgeons Columbia University 1954, in internal medicine residency at Philadelphia General Hospital, available between July and September, 1956.

Orthopedics

Robert E. Landstra, American Legion Hospital for Crippled Children, 2350 Lakeview Ave., St. Petersburg, Florida, age unknown, now in orthopedic residency training, availability unknown.

Pathology

*Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, George Washington University, 1950, will finish four years pathology residency in January, 1957, will consider immediate placement if board requirements are not necessary.

*William McIntosh Hindman, Receiving Hospital, Detroit, Michigan, age 38, University of Tennessee, 1945, four year pathology residency, Detroit Receiving Hospital, Board eligible, available July, 1956.

Pediatrics

*Leslie W. Langley, Jr., 1709 De Pauw Ave., New Albany, Ind., age 32, University of Louisville School of Medicine, 1953, now taking second year of pediatric residency, veteran, available July 1, 1956.

*Carl Frederick Wagner, 130 E. Shields, Cincinnati 20, Ohio, age 48, University of Cincinnati, 1935, interned University Hospital of Cleveland and served residency at Cincinnati, 1935, veteran, prefer clinic or associate, available May 1, 1956.

Surgery

*Albert Frederick Cunningham, U. S. Naval Hospital, Memphis, Tenn., age 35, University of Arkansas, 1947, available April 15, 1956.

*Edward Wendell Foster, 147 W. Main, Meriden, Conn., age 62, Harvard University School of Medicine, 1924, certified by specialty board, veteran, available now, would consider surgery, obs.-gyn., or general practice.

*C. Richard Jernigan, Parkland Memorial Hospital, Dallas, Texas, age 29, Southwestern Medical College 1948, will be Board qualified in General Surgery January 1, 1956, veteran, available January 1, 1956.

*Arthur Andrews McMurray, 3203-B Cherrywood, Rd., Austin 2, Texas, age 35, University of Tennessee, 1950, Board eligible in general surgery, veteran, available July, 1956.

(Continued on Page 101)

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In clinical trials, over 80% of cases have been cleared of the infection by one course of treatment with 'Antepar.'

Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.: J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.: Brit. M. J. 2:755, 1953.

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"Ninety per cent of the children passed all of their ascarides . . ."

Brown, H. W.: J. Pediat. 45:419, 1954.

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Do You Have A Suggestion On Accreditation of Hospitals?

The June, 1955, House of Delegates of the American Medical Association authorized the appointment of a committee to review the functions of the Joint Commission on Accreditation of Hospitals.

The purpose of the committee was to make an independent study and survey as to whether the present program of accreditation was working a hardship on either the hospitals, staff members, or the securing of membership on staffs of hospitals.

Doctor Burton on Committee

Appointed to this important committee was John F. Burton, M.D., of Oklahoma City. Doctor Burton states that he would like to have as many Oklahoma hospitals and physicians as possible give their views to the committee.

The committee is especially interested in the following:

1. The general understanding by physicians of the functions of the Joint Commission.

2. Whether the method of appeal from an adverse ruling regarding accreditation is satisfactory.

3. The effect on the individual physician's hospital connections due to actions of the Joint Commission.

4. Whether any organizations not now represented should have official representation on the Joint Commission.

5. The effect of the Joint Commission's requirements concerning such matters as staff meetings.

6. The pros and cons of separating administrative and professional accreditation functions in the inspection of hospitals.

7. Constructive suggestions for improving the hospital accreditation program.

Anyone having comments to make on the problems of accreditation should write either to W. C. Stover, M.D., Chairman, Committee to Review Functions of Joint Commission on Accreditation of Hospitals, 535 North Dearborn St., Chicago 10, Ill., or to John F. Burton, M.D., 434 N. W. 13th St., Oklahoma City, Okla.

Medical Societies Around the State

Stephens County

J. P. Keller, M.D., Duncan, was recently elected president of the Stephens County Medical Society. Casper H. Smith, Jr., M.D., was named vice-president and Dwight Weedn, M.D., secretary-treasurer. All are from Duncan. Allen Green, M.D., Oklahoma City, was guest speaker at the meeting.

Garfield-Kingfisher

Richard M. Burke, M.D., Oklahoma City, spoke on Tuberculosis at the Garfield-Kingfisher County Medical Society recently.

Cherokee-Adair

Mark Everett, Dean of the University of Oklahoma School of Medicine, was guest speaker at a recent meeting of the Cherokee-Adair Medical Society held in Stilwell. Purpose of his visit was to discuss establishing a preceptor program in that city.

Seminole-Hughes

A. R. Carney, M.D., Tulsa, was guest speaker at a recent meeting of the Seminole-Hughes County Medical Society.

East Central

Members of the East Central Medical Society held installation ceremonies and a dinner-dance at the Severs Hotel of Muskogee in January. New officers are Marvin Elkins, M.D., president; John R. Rafter, M.D., vice-president; E. F. Stratton, M.D., secretary; and Tom Gafford, M.D., is outgoing president.

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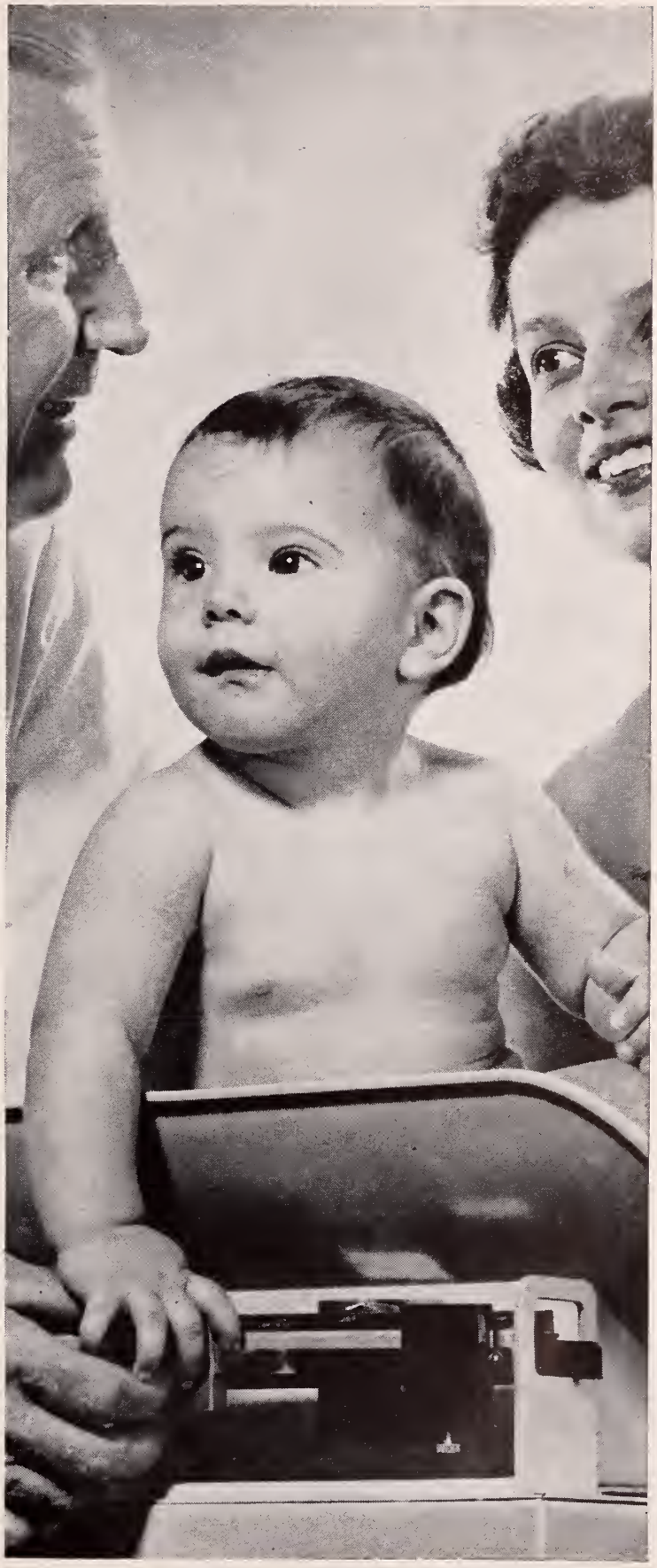
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WANTED: General practitioner, town of 1500 population, southwest Oklahoma, modern brick buildings available, partly furnished, would be only doctor in Tipton Valley. New county hospital 14 miles on pavement. Lucrative practice awaits man who can take over. For information, write or call Paul Largent, Tipton, Oklahoma.

OKLAHOMA CITY OFFICE SPACE. Located across from St. Anthony Hospital and Pasteur Building, includes private parking facilities, air conditioning, X-ray, laboratory and other equipment. Formerly occupied by physician who has specialized in other work. For full information contact Jack Barthold at P.O. Box 6246, Oklahoma City 11, or call GA 7-2441, Oklahoma City.

FOR SALE: Latest model Beck-Lee Cardiall. Used less than 10 times, $350.00. Unused Leitz Photrometer $125.00. Both for $450.00. William A. Vint, M.D., Veterans Administration Hospital, Oklahoma City.

WANTED IMMEDIATELY: Man interested in general practice in association with established physician in the greater Oklahoma City area, with possible part ownership in the future. Write Key R, care of the *Journal*.

SPACE AVAILABLE. On May Avenue, Oklahoma City, immediately, near proposed Baptist Hospital site for qualified obstetrician. No long term lease required. Contact C. M. Harvey, M.D., 2900 N.W. 67th, Oklahoma City, Okla.

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FORT WORTH

BOOKS RECEIVED

The following books have been received by the *Journal* office. As space permits and the context warrants, books will be reviewed.

VASCULAR SURGERY. Medical Department, United States Army, Surgery in World War II. Edited by Daniel C. Elkin, M.D. and Michael E. DeBakey, M.D. Office of the Surgeon General, Department of the Army, Washington, D. C., 1955.

HAND SURGERY. Medical Department, United States Army, Surgery in World War II. Edited by Sterling Bunnell, M.D. Office of the Surgeon General, Department of the Army, Washington, D. C., 1955.

LIFE STRESS AND ESSENTIAL HYPERTENSION, A Study of Circulatory Adjustments in Man. Stewart Wolf, M.D., Philippe V. Cardon, Jr., M.D., Edward M. Shepard, M.D. and Harold G. Wolff, M.D., The Williams and Wilkins Company, 1955.

CIBA FOUNDATION COLLOQUIA ON AGEING. Vol. 1, General Aspects. Editors, G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch. and Margaret P. Cameron, M.A., A.B.L.S., assisted by Joan Etherington. Little, Brown and Co., Boston, 1955.

CIBA FOUNDATION SYMPOSIUM ON EXPERIMENTAL TUBERCULOSIS, Bacillus and Host with an Addendum on Peprosy. Editors, G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch. and Margaret P. Cameron, M.A., A.B.L.S., assisted by Cecilia M. O'Connor, B.Sc., Little, Brown and Co., Boston, 1955.

HYPNOTIC SUGGESTION, Its Role in Psychoneurotic and Psychosomatic Disorders, New York, Philosophical Library, 1956.

THE NATIONAL FORMULARY. Published by the American Pharmaceutical Association, Washington 7, D. C., Distributed for the Association by J. B. Lippincott Co., Philadelphia and Montreal, 1955.

PREVENTIVE MEDICINE IN WORLD WAR II. Medical Department, United States Army, Vol. III, Personal Health Measures and Immunization. Editor in Chief, Col. John Boyd Coates, Jr., M.C., Editor for Preventive Medicine, Ebbe Curtis Hoff, Ph.D., M.D., Assistant Editor, Phebe M. Hoff, M.A., Office of the Surgeon General, Department of the Army, Washington, D. C., 1955.

PREVENTIVE MEDICINE IN WORLD WAR II. Medical Department, United States Army, Vol. II, Environmental Hygiene. Editor in Chief, Col. John Boyd Coates, Jr., M.C., Editor for Preventive Medicine, Ebbe Curtis Hoff, Ph.D., M.D., Office of the Surgeon General, Department of the Army, Washington, D. C., 1955.

Poison Information Center May Be Established in State

Through the cooperation of the University of Oklahoma School of Medicine, the Oklahoma State Health Department and the Oklahoma State Medical Association, there has been discussion concerning the establishment of a Poison Information Center.

H. A. Shoemake, Ph.D., Professor of Pharmacology at the Medical School; John Shackelford, M.D., of the State Health Department; and H. V. L. Sapper, M.D., Oklahoma City, representing the Association, recently met in Dallas, Texas, with Dr. Edythe P. Hershey, Regional Director of the Children's Bureau, to discus sthe possibility of receiving some financial assistance. The Center would be established at the Medical School on a 24 hour basis and would be designed to service both the State of Oklahoma and Texas. If plans are completed for the establishment of the center, allied groups and outside agencies that would be interested in the program will be asked to appoint representatives to act in an advisory capacity.

Physician Placement

(Continued from Page 95)

Urology

Woodrow Payne, M.D., 764 McConnell, Memphis, Tenn., age 34, University of Tennessee, 1944. Board Qualified in Urology, veteran, available July, 1956. (Wants city 20,000-75,000 — private proup, partnership).

*Henry Ernest Wolfe, Jr., 879 Rosewood Ave., Vallejo, Calif., age 34, Albany Medical College, 1947, board qualified in urology, available upon separation from active duty, Aug. 15, 1956.

Southwestern Surgical Congress Meets April 16-18, in Tucson

The Eighth Annual Meeting of the Southwestern Surgical Congress will be held in Tucson, Arizona April 16, 17, and 18. Charles R. Rountree, M.D., Oklahoma City, is President and C. M. O'Leary, M.D., also of Oklahoma City, is Secretary-Treasurer. Partial program is listed below and complete programs may be obtained by writing Miss June Marchant, Executive Secretary, Southwestern Surgical Congress, 207 Plaza Court Building, Oklahoma City 3, Okla.

Monday, April 16

9:00 a.m. The Frozen Shoulder — Case Analysis with Reference to Treatment
Robert M. Lee, M.D., Fort Collins, Colo.

9:20 a.m. Surgical Management of Pigmented Lesions
Charles E. Lockhart, M.D., Springfield, Mo.

9:40 a.m. Extrophy of the Urinary Bladder, Plastic Repair Combined with Bilateral Osteotomy of Illium
William G. Schultz, M.D., Tucson, Arizona

10:00 a.m. The Urologic Significance of Imperforate Anus
Ian M. Thompson, M.D. and Charles A. Hooks, M.D., Galveston, Tex.

10:20 a.m. Immediate and Delayed Repair of Hand Injuries
Joseph H. Boyes, M.D., Los Angeles

11:00 a.m. Visual Aids in Surgical Presentations
Thomas G. Orr, Jr., Kansas City, Kans.
Congenital Dislocation of Hip in the Apache Indian
John R. Schwartzmann, M.D., Tucson, Arizona

12:20 p.m. Roundtable Luncheon

2:00 p.m. Panel — Industrial and Rural Injuries of the Hand

3:00 p.m. Use of Lyophilized Homografts on Dura Mater in the Repair of Hernias
Francis C. Usher, M.D., Houston, Tex.

3:20 p.m. Use of Full Thickness Skin Grafts to Repair Difficult Hernias
Vincent L. Rees, M.D., Salt Lake City, Utah

3:40 p.m. Hiatus Hernia: Surgical Indications
Francis A. Barrett, Jr., M.D., Cheyenne, Wyoming

4:00 p.m. Experience in the Surgical Management of Interatrial Septal Defects and Pulmonic Stenosis under Hypothermia
John M. Salyer, M.D., Clinton S. Lyter, M.D., Byron E. Pollock, M.D., Denver, Colorado

Tuesday, April 17

7:30 to
9:00 a.m. Breakfast Meeting — Moderated by Kenneth C. Salyer, M.D., Denver, Colo.
Congenital Arteriovenous Fistula
H. Calvin Fisher, M.D. and Marvin E. Johnson, M.D., Denver, Colo.
Acute Arterial Injuries in Civilian Practice
Oscar Creech, Jr., M.D. and Michael DeBakey, M.D., Houston, Tex.
Treatment of Peripheral Arteriosclerotic Disease by Arterial Homografting
Dale J. Austin, M.D. and Jesse E. Thompson, M.D., Dallas, Tex.
Necrotizing Panarteritis Following Repair of Coarctation of the Aorta
John B. Grow, M.D., Charles V. Demong, M.D. and W. R. Rundles, M.D., Denver, Colo.

9:00 a.m. The Management of Massive Upper Gastro-Intestinal Hemorrhage
Edwin M. Sykes, Jr., M.D. and Asher R. McComb, M.D., San Antonio, Tex.

9:20 a.m. A Critical Evaluation of the Bilroth II Type Gastro-Jejunostomy
Howard T. Robertson, M.D., Denver, Colo.

9:40 a.m. Surgical Complications of Diverticulitis and Diverticulosis of the Sigmoid Colon
J. B. Littlefield, M.D., Tucson, Arizona

10:00 a.m. Acute Appendicitis in the Elderly Male
William J. Gillesby, M.D. and Curt M. O'Rielly, M.D., Hines, Ill.

10:20 a.m. Anesthesia in the Aged and Poor Risk Patient
John Adriani, M.D., New Orleans, La.

11:00 a.m. Examination of the Breast
Dudley Jackson, M.D., San Antonio, Tex.
Demonstration of New Electronic Instrument—The "Cardiocaster"
Paul D. Keller, M.D., Salt Lake City, Utah

12:20 p.m. Roundtable Luncheon

2:00 p.m. Panel — New Concepts and Recent Advances in Anesthesia

3:00 p.m. Presidential Address — Polio Vaccination Program in Oklahoma, and in the Southwest in General
Charles R. Rountree, M.D., Oklahoma City

Wednesday, April 18

7:30 a.m. to
9:00 a.m. Breakfast Meeting — Moderated by Leonard P. Eliel, M.D., Oklahoma City

Adrenal Support in the Surgical Patient

Albert E. James, M.D. and Robert Woodruff, M.D., Denver, Colo.

Functioning Tumors of the Adrenal Cortex

L. L. D. Tuttle, M.D. and William B. Gordon, M.D., Houston, Tex.

Urinary Chloride Concentration as an Aid in the Diagnosis of Acute Adrenocortical Insufficiency

J. Robert Spencer, M.D. and William H. Wierman, M.D., Denver, Colo.

9:00 a.m. The Diagnosis and Treatment of Mixed Tumor of the Parotid Gland

Robert A. Wise, M.D., Portland, Oregon

9:40 a.m. Neonatal Respiratory Problems Exclusive of Central Nervous System Cases

Hector W. Benoit, Jr., M.D. and John H. Mayer, Jr., M.D.

10:00 a.m. A Photographic Study of the Superior and Inferior Thyroid Arteries and the Superior and Inferior Laryngeal Nerves

Bernard T. Daniels, M.D., Durwood C. Clader, M.D. and Patrick W. Luter, M.D., Denver, Colo.

10:20 a.m. Cholecytostomy in Modern Surgery

Cyril Costello, M.D., St. Louis, Mo.

10:40 a.m. Annular Pancreas

L. H. Wilkinson, M.D. and A. G. Simms, II, M.D., Albuquerque, New Mexico

11:00 a.m. Panel — Carcinoma of the Breast

Included in the entertainment will be a banquet, barbecue and a trip to Old Mexico. Special entertainment is also planned for the ladies attending and facilities for golf, fishing and other sports are available.

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*Krantz, J. C., Jr., and Carr, C. J.: The Pharmacologic Principles of Medical Practice, ed. 3, Baltimare, The Williams and Wilkins Campany, 1954, p. 998.

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Deaths

J. Paul Jones, M.D.
1866-1956

J. Paul Jones, M.D., pioneer Washita county physician, died at his home in Dill City January 9.

Doctor Jones was born at Douglas, Nacogdoches county, Texas, March 24, 1866. He attended Vanderbilt University Medical School and Kansas Medical College.

He practiced medicine in Texas until November, 1898, when he moved to Cloud Chief, later moving near the present site of Clinton and to Port and Retrop, moving to Dill City in 1930. Doctor Jones received an O.S.M.A. 50 year Pin in 1949.

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APRIL Complete Annual Meeting Program

MAY Fiftieth Anniversary Issue

Radio-Active Cobalt Room Built By State Physicians

Doctors John R. Danstrom, David C. Lowry and Haven W. Mankin, all of Oklahoma City, announce the installation of the first Cobalt 60 teletherapy in the state of Oklahoma for the treatment of cancer. This installation has been made at their office at 528 N. W. 12, Oklahoma City, where a special room has been built to house the radio-active cobalt. This special room has walls which vary in thickness from 36 to 18 inches of solid concrete.

Cobalt therapy is primarily used for the treatment of deep seated cancer, such as those in the pelvis, bladder, prostrate, lung and esophagus. However, it will be used to treat most all malignancies except skin cancer.

Cobalt therapy offers the following advantages over conventional deep x-ray therapy in that is gives less skin reaction, gives a better depth dosage to the tumor, and causes less constitutional reaction.

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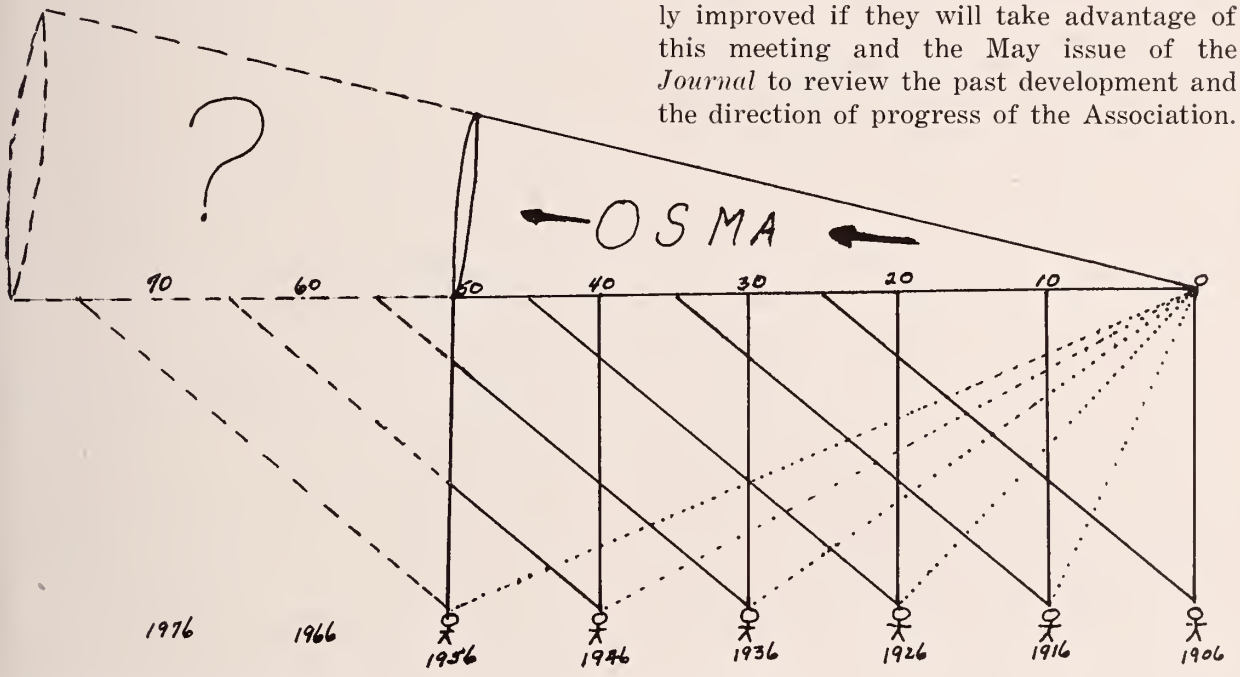
W. H. HELDENBRAND, Pres. **J. R. PROPPS, Secy.-Mgr.**

Editorials

Fifty Years of Progress

The State Association's meeting May 7, 8 and 9 commemorates its 50th Anniversary. The O.S.M.A. is a force which is accelerating in influence in our daily lives. The eye of the member sees this force in relation to his point of vantage in years. It is fortunate that many members keep their interest and concern for a lifetime. One cannot. however, be too critical of those who retire into the shell of their own affairs, for by so doing they make room for younger men.

If we arbitrarily allow 25 years of membership to see a man through his active participation in the affairs of and in planning for the Association, from the above graph we can see that our future depends for the most part on men who have been in the organization 20 years or less. The perspective of these on whom we must rely will be greatly improved if they will take advantage of this meeting and the May issue of the *Journal* to review the past development and the direction of progress of the Association.



Accidental Poisoning

The *Journal* is deviating from its policy of nothing but the program for the coming meeting in the April issue by publishing the article on page 107.

The danger inherent in accidental poisoning demands special treatment. The problem has become a complex one because of the many drugs and chemicals now in common use—so complex that an information center and hospital sub-centers are required for adequate and quick treatment of the poisoned person insofar as is possible. The *Journal* is cooperating fully with the plan and will carry pertinent articles and inserts in future issues.

Chi Square

In the March issue standard deviation was explained; this is used as a test for the "significance" between the results of two different experiments. Frequently, however, in medicine and in medical research it is necessary to compare more than two groups. An illustration of this, which will be used throughout this article, is the incidence of prematurity by the day of the week. In this there are seven groups (days) having two characteristics: 1. premature and 2. mature or term babies. This gives us a total of 14 comparisons to test significance.

For comparison of such groups for significance the Chi Square (X^2) test has been

developed (originally by Karl Pearson). Many authors will state their results are significant by X^2. When the reader sees this he may think this is a new chemical laboratory test to aid in diagnosis of certain illness. But it is not.

The question this test answer is: "Is it likely that the magnitude of the differences between these occurrences by groups could arise merely by chance in taking samples of a certain size?"

When the X^2 test proves significant, we can say the differences in occurences are real, in the sense that they would not be likely to disappear (though they might be modified) if we took another sample of equal size.

Chi Square (X^2) is the sum of all of the groups figured on the following formula: observed number of cases minus the expected number of cases squared and then divided by the expected number of cases.

For example: on Sunday there were 388 premature babies delivered of a series of 40,000 deliveries over a five year period. The number which would be expected to be delivered, would be the total number of deliveries for that day times 7.5 per cent or 399.5. Seven and one-half per cent is the incidence of prematurity for the whole series for all days combined, or what could normally be expected of prematurity on any day of the week. The observed (388) minus the expected (399.5) equals 11.5. This squared equals 132.25. This figure is then divided by the expected number of cases (9399.5) = 0.337.

The number of mature babies delivered on Sunday was 4,399 which is the observed number. The total of all deliveries for Sunday times 92.5 per cent equals 4,927.5 or the expected number of mature deliveries. The observed mature deliveries (4,939) minus the expected mature deliveries (4927.5) equals 11.5. This figure (11.5) squared and then divided by the expected mature deliveries (4927.5) equals 0.028.

This same procedure is performed for each day of the week. The sum of all of these calculations is then obtained to reveal a figure of 12.650, which is X^2.

When interpreting the value of X^2, account must be taken both of the value itself, and the number of sub-groups contributing to it. The mathematical foundation of this is very complex and all statisticians interpret simply by means of published tables, rather than going through these complex equations. A sample of this is published here to illustrate this problem.

In our problem there are two columns (premature and mature) and seven rows (Sunday, Monday, Tuesday, etc.). Therefore, N would be (2-1) times (7-1) equals 6. We then look at 6 under N and our summation for X^2 was 12.650 or close to the figure 12.592. This figure is under the column headed "P" equals 0.05.

At this stage you are saying, "I'm no better off than when I started because I still don't know if the difference is one that could occur by chance."

Consequently, we will have to explain "P". It is the probability of this proportion, rate etc., occurring per 100 different samplings of a similar group of experiment. Many statisticians take "P" equals 0.05 as a conventional level of "significance" i.e., if "P" is greater than 0.05 (up to 0.99) then the observed values do not differ from the expected values by more than might reasonably

(Continued on Page 122)

Table of

N	P=0.90	0.70	0.50	0.20	0.05	0.02	0.01
1	0.0158	0.148	0.455	1.642	3.841	5.412	6.635
3	0.504	1.424	2.366	4.642	7.815	9.837	11.341
6	2.204	3.828	5.348	8.558	12.592	15.033	16.812
10	4.865	7.267	9.342	13.442	18.307	21.161	23.209
30	20.599	25.508	29.336	36.250	43.773	47.962	50.892

N equals (Number of Columns -1) times (Number of Rows -1)

POISON *Information Center*

The problem of accidental deaths has always been acute and a great deal of attention has been given to preventing as many as possible. Much of the publicity has, however, been directed to prevention of accidents resulting from the operation of motor vehicles. The story of the past few years demands interest in the prevention and treatment of other accidents, particularly those in connection with toxic agents.

In 1953[1], there were 2,614 deaths in the United States as the result of accidental poisoning. Of these, 1,391 were due to the accidental ingestion of liquid and solid substances, and among these, 445 or 31.99 per cent were children under the age of five years. Kerlan[2, 3] estimates the number of non-fatal poisonings to be 100 to 150 times the number of fatalities. There are, therefore, according to these estimates a minimum of approximately 45,000 cases of poisoning in children, under five years, each year in the United States. Arena[4] states: "Childhood deaths from poisoning occur disproportionately often in 12 southern states—Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. The rate of these states as a group is 4.09 per 100,000 population as against 2.00 for the remainder of the country." Wheatley[5] gives data indicating that accidents are the leading cause of death in children under five years and that slightly more than five per cent of accidental deaths are caused by poisoning. The report on maternal, infant and child mortality by the Oklahoma State Department of health (1952) also lists accidents as the leading cause of death in children.

In an effort to reduce the number of cases of accidental poisonings in Oklahoma, it was decided to establish a "Poison Information Center" at the School of Medicine with the cooperation of the Oklahoma State Medical Association and the Oklahoma State Department of Health. An application for funds to defray the expenses of the project has been filed with the Regional Medical Director for the Children's Bureau of the United States Department of Health, Education, and Welfare. The President of the Oklahoma State Medical Association has taken the necessary steps to get a General Committee appointed.

The objectives of the Center will be to prevent as many cases of accidental poisoning as possible and to improve the treatment of poisoning when it does occur. These objectives will be sought by:

(1) *Increasing the preventive measures:*

(a) Educational program for the public, as to dangers of potentially toxic agents and best methods for preventing poisoning, through the medium of newspaper, radio, and television. This is to be carried out with the cooperation of community agencies such as Safety Council, P.T.A., Red Cross, Local Health Departments, etc.

(b) Educational program, for physicians and pharmacists, directing attention to those substances causing poisoning and furnishing material for their use in giving preventive information to their patients and to the public.

(c) Encouraging the teaching of preventive measures in public schools, colleges, and universities.

(d) The use of pertinent professional personnel such as physicians, pharmacists, veterinarians, botanists, chemists, etc., in obtaining information on potentional poisons and the prevention of poisoning therefrom.

(2) *Improving Treatment*

(a) Development of specific instructions for use of medical personnel.

1. Instructions as to best measures to prevent absorption and /or corrosion.
2. Instructions regarding gastric lavage.

3. Specific antidotes, if available, together with dosage.
4. Suggested treatment in hospital or home to combat symptomatology of poisoning.
5. Suggestions for preventing latent effects such as liver or kidney damage, etc.

(b) Preparation of a file of the various potentially toxic substances together with symptomatology and suggested treatment.

(c) Efforts to increase availability of information on a 24 hour basis.

(d) Obtaining reports of cases of poisoning, the treatment used, and results; and analyzing statistically.

(e) Development of specific instructions for first aid treatment for use of non-medical persons.
1. Instructions about emesis.
2. Administration of simple procedures to prevent absorption, etc.

The author (H. A. Shoemaker) will serve as Director of the Center and Theodore Pfundt, M.D., Assistant Professor of Pediatrics, University of Oklahoma School of Medicine, will serve as Assistant Director.

A General Committee, consisting of representatives of professional and lay organizations interested in the prevention of accidents and in the treatment of poisoning (Medicine, Public Health, Pharmacy, Veterinary Medicine, etc.) will serve as an advisory group for the program. The General Committee will select a Sub-Committee from among their membership to serve as an interim advisory committee to the Director.

The function of the Center will include the following:

(a) Collection of information on the composition of potentially toxic substances, probable symptoms and treatment.

(b) Collection of bibliography on treatment of poisoning and assembling references pertaining to poisoning.

(c) Preparation of a Poison Handbook for the use of sub-centers.

(d) Preparation of notes on poisoning and treatment for physicians and hospitals.

(e) Collection of reports on poisoning and tabulating the reports as to incidence, type, results of treatment, etc.

(f) Providing sub-centers with suggested lists of drugs, appliances and references considered essential for an adequate poisoning treatment program.

(g) Providing forms to be used in reporting cases of poisoning.

(h) Act as a liason between physicians and the toxicological laboratory when established, and when necessary.

(i) Assist in the establishment of sub-centers in hospitals throughout the area.

(j) Maintain a 24 hours service for information to sub-centers, physicians and other professional persons.

It is intended to establish Sub-Centers in the various hospitals for the treatment of persons who are the victims of poisoning or to furnish physicians in their community with available information on poisoning when requested. However, any physician can call or write directly to the Center in Oklahoma City for information at any time when it is in operation.

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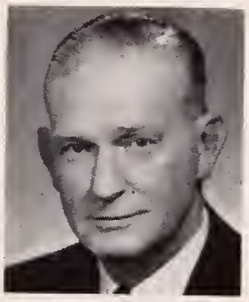
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PRESIDENT'S LETTER

Being President of the Oklahoma State Medical Association for the past year has been an honored privilege. This privilege carries with it no immunities but rather duties and responsibilities—duties that are thought and time consuming extending in scope from the smallest county society level to the national level, The House of Delegates of the American Medical Association, yes even to the congressional legislation in Washington, D. C.; responsibilities of executing the plans and reaching for objectives that will result in the best services to and interests of the recipients of the profession, the public, as well as the interests of the profession individually and collectively. These have been the endeavors of the year.

How well the duties have been performed and the objectives attained, time only will tell. This we know, that the magnitude of the objectives has been made possible by forty-nine preceding physicians who have been presidents of the Oklahoma State Medical Association. The degree of attainment of these objectives is wholly due to the initiative and active interests of the individual physicians in the State, the organizational unison of the profession, the whole hearted efforts of the Women's Auxiliary, and last but not least, the Executive Secretary and staff of the association. These statements are factual and indisputable. Without the thinking and support of all concerned progress professionalwise cannot be best and will be retarded more than commensurately by the lack of individual and group initiative—both thinking and action.

It is an unbiased observation over the past few years that Oklahoma medicine has made great strides. Our profession is rendering probably better public service than at any time in the past. This is due to many contributing factors. Probably the greatest of the contributing factors is the post graduate work being done by the individuals as well as the groups in the profession. The General Practice Organization has initiated and fostered this activity probably more than any other single group. Our own medical school has developed a post graduate program that offers most excellent teaching in practically every phase of medical practice. Our legislators are cognizant of this professional progress, are receptive of suggestions that will give ever increasingly better health care to the public and are actively supporting measures that will progressively elevate the health status of the public. Our governor is vitally interested in and has been most cooperative with our current and anticipated progress. If we continue this all-inclusive and far reaching activity—and we shall—we can again say with William Allen White, "I do not fear tomorrow for I have seen yesterday and I love today."

R. Q. Goodwin

President

Related Meetings

OKLAHOMA RADIOLOGY SOCIETY

A program is planned for Sunday afternoon, May 5, at the Thunderbird Inn. Election of officers is also planned. Present officers are John Danstrom, M.D., Oklahoma City, President; Bert Mulvey, M.D., Secretary-Treasurer; and Sol Wilner, M.D., Tulsa, Vice-President.

OKLAHOMA ACADEMY OF OPHTHALMOLOGY AND OTALARYNGOLOGY

John W. Henderson, M.D., Rochester, Minn., a guest speaker at the annual meeting, will meet with the society on Monday, May 7. The time and place will be announced later. Details can be obtained from Coye W. McClure, M.D., Secretary; or Tullos Coston, M.D., President.

OKLAHOMA SOCIETY OF ANESTHESIOLOGISTS

The following program is announced for Sunday, May 6, at the Skirvin Hotel:

10:30 a.m. Anesthesia for Intracardiac Surgery—Kenneth Keown, M.D.,
Discussion: John Carey, M.D.

12:15 p.m. Luncheon

1:00 p.m. Business session

2:00 p.m. Recess

2:15 p.m. Five year survey on operating room fatalities at the University of Oklahoma Hospitals—Theodore Wenger, M.D.

2:30 p.m. Panel Discussion on Operating Room Fatalities
Moderator: Howard Bennett, M.D.
Panel: Kenneth Keown, M. D.
John Carey, M.D.
Woodrow Corder, M.D.

OKLAHOMA DERMATOLOGY SOCIETY

Dinner-dance will be held Friday, May 5, at 7:30 p.m., Hillcrest Country Club. Reservations should be made with C. Jack Young, M.D., 504 Osler Building, 1200 N. Walker, Oklahoma City. Phone FO 5-0646. Scientific program will begin May 6 at 10:00 a.m. at University Hospital. Presentation of cases will be made by the University of Oklahoma School of Medicine. Discussion of cases presented will begin at 11:30 a.m. and luncheon will be served in the dining room of University Hospital at 12:30 p.m.

OKLAHOMA ORTHOPEDIC SOCIETY

Next meeting will be held in Lawton, Oklahoma on Sunday, May 6, 2:00 p.m., in the Doctor's Lounge at Memorial Hospital.

OKLAHOMA RHEUMATISM SOCIETY

Annual meeting will be held at Lake Murray Lodge, Ardmore, May 25 and 26. A dinner will be held at 6:30 p.m. Friday, May 25, followed by a brief address by Russel L. Cecil, M.D. Those appearing on the Saturday program include, E. Goldfain, M.D., Max N. Huffman, M.D., S. Yale Andelman, M.D., William K. Ishmael, M.D., Moorman P. Prosser, M.D., Arthur Hellbaum, M.D., J. N. Owens, M.D., Howard B. Shorbe, M.D., Edmond H. Kalmon, M.D., Mary Duffy, M.D., and Richard W. Payne, M.D. Doctor Cecil will also appear on the scientific program on Saturday. Reservations, including a $10.00 room deposit, should be made directly with Lake Murray Lodge. Richard W. Payne, M.D., Oklahoma City is President of the Society.

OKLAHOMA STATE MEDICAL ASSISTANTS SOCIETY

Annual meeting Friday, May 4, through Sunday, May 6, 1956, Biltmore Hotel.

MID CENTRAL STATES ORTHOPEDIC MEETING

Will be held in Oklahoma City April 20-21 at the Veterans Administration Hospital. Oklahoma will be the host this year. Elias Margo, M.D., Oklahoma City, is president of the Society which comprises Oklahoma, Arkansas, Kansas, Missouri, Colorado.

Monday Evening Program

For the entertainment of visiting Oklahoma doctors, their wives and guests, and the general public, the Oklahoma State Medical Association has arranged a special program for Monday evening, May 6th, in the Hall of Mirrors of the Municipal Auditorium featuring Dr. (Major) David G. Simons, Chief of the Space Biology Branch of the Aero Medical Field Laboratory at Holloman Air Development Center near Alamogordo, New Mexico.

Program

8:00 p.m. Introduction of Major Simons by R. Q. Goodwin, M.D., President, Oklahoma State Medical Association.



Address of the evening. "The Challenge of Space Medicine" (accompanied by 16 mm. sound and 35 mm. film) Major David G. Simons.

At the brink of an era when supersonic aircraft will fly high into the stratosphere, it is important that facts are unveiled concerning the psychological and physiological effects of cosmic radiation and weightlessness upon the human body. It is the objective of products conducted at the Aero Medical Laboratory at Holloman Air Development Center, New Mexico, to develop a better understanding of these two problems and to overcome them. The man who is chief of this project is Major David G. Simons, Space Biology Branch chief at the Aero Medical Laboratory.

Entering the service in 1942 as a second lieutenant, Major Simons first started working with weightlessness problems in 1947 when he was assigned for two years at Wright-Patterson Air Force Base, Ohio. He was project officer there for rocket experiments in which the physiological responses on monkeys to weightlessness were studied.

To study weightlessness, small animals are sent up into the stratosphere in Aerobee rockets. The trajectory of the rocket reaches a point where the gravitational pull of the earth is void and the animals float within their chambers. Through these experiments under Maj. Simon's supervision, it is hoped that man will be better able to orient himself to a state of weightlessness whenever his exploits take him that far from the earth.

Major Simons attended an advanced course in the School of Aviation Medicine for one year starting in 1949. He then served in Japan as flight surgeon from 1950 through 1952 before coming to Holloman.

Since taking his present position at Holloman, Maj. Simons has studied the biological hazards of primary cosmic radiation at altitudes of 85,000 feet and above. In these experiments, plastic balloons are used as vehicles to float animal subjects into the stratosphere in gondolas as high as 120,000 feet. When the balloons descend, the gondolas are recovered and the animals are studied thoroughly for damages caused by exposure to cosmic particles.

Maj. Simons received a B.S. degree in chemistry in 1943 from Franklin and Marshall College, Lancaster, Pa. He entered Jefferson Medical College in Philadelphia and was graduated with an M.D. degree in 1946. He is certified by the American Board of Preventive Medicine in the specialty of Aviation Medicine.

President's Inaugural Dinner Dance

TUESDAY, MAY 8, 1956

Persian Room—Skirvin Tower Hotel

6:00 SOCIAL HOUR, Persian Room, Skirvin Tower Hotel, Compliments Oklahoma County Medical Society

7:00 DINNER, Persian Room, Skirvin Tower Hotel
PROGRAM

Introduction of Guests and Officers

Inaugural of H. M. McClure, M.D., Chickasha

9:00 DANCING to the music of Ted Weems and His Orchestra until 1 a.m., Persian Room



Ted Weems

Reservations . . .

Tickets to the President's Inaugural Dinner-Dance are limited to the capacity of the Persian Room. The price is $6.50 per person, including social hour, dinner, inaugural program, and the Ted Weems Dance.

Tickets may be purchased in advance by writing the Oklahoma State Medical Association, 1227 Classen Drive, Oklahoma City. Checks should be made payable to "Oklahoma State Medical Association." Tickets will be mailed by return mail. Dinner-Dance tickets will also be available at the Registration Desk in the Zebra Room of the Municipal Auditorium as long as they last.

Ted Weems and His Orchestra

Ted Weems, who will play for the President's Annual Dinner-Dance, has become one of the nation's top name band attractions after more than two decades as a bandleader.

The Weems' record of "Heartaches" hit the all-time high scale of three million copies and is responsible for Ted's having placed first in practically all of the major popularity polls for 1947.

Not only is Mr. Weems an accomplished bandleader, but he has also written many popular songs, the most successful of which is the famous hillbilly tune, "The Martins and the Coys."

Perry Como, Marilyn Maxwell and Red Ingle, among others, have used this splendid orchestra as a stepping stone to their outstanding careers as individual performers. Currently, Ted is featuring the talented and popular young lady, Bonnie Ann Shaw.

General Information

HOTEL ACCOMODATIONS

Physicians planning to attend are asked to fill out and return the hotel reservation form which appears in this *Journal*. Make reservations with the Hotels Committee, Oklahoma State Medical Association, 1227 Classen Drive, Oklahoma City 3. There is no headquarters hotel.

REGISTRATION

Registration will be open Monday, May 7, in the Zebra Room of the Municipal Auditorium at 8:30 a.m. Delegates may register, both for the House of Delegates and the General Meeting, in advance on Sunday, May 6, in the Hall of Mirrors of the Municipal Auditorium, beginning at 12:00 noon.

SCIENTIFIC SESSIONS

All Scientific Sessions will meet in the Zebra Room of the Municipal Auditorium, 9:00 to 5:00 on Monday, Tuesday, and from 9:00 until noon on Wednesday.

HOUSE OF DELEGATES

The House of Delegates will meet on Sunday May 6 at 1:00 p.m. in the Hall of Mirrors on the Mezzanine Floor of the Municipal Auditorium. The first session will adjourn at 5:00 p.m. and reconvene at 7:00 p.m.

PAST PRESIDENT'S BREAKFAST

The Annual Past President's Breakfast will be held Monday morning, May 7, in the Regency Room of the Skirvin Hotel at 8:00 a.m. The Blue Shield Plan will be the sponsor of this event.

GOLF

A Golf Tournament will be held at the Twin Hills Country Club, Wednesday afternoon, May 9. Entries may register from noon until 1:00 p.m.

SCIENTIFIC EXHIBITS

Forty Scientific Exhibits will be located in the Zebra Room of the Municipal Auditorium and will be open Monday and Tuesday from 9:00 a.m. to 5:00 p.m., and on Wednesday from 9:00 a.m. until noon. An excellent group of Scientific Exhibits is being provided this year, and you are urged to visit them.

HOBBY SHOW

A Hubby Hobby Show is being sponsored by the Woman's Auxiliary, and will be held in the Zebra Room. This show will feature the handicrafts of physicians over the state, and will display a great variety of their hobbies.

COMMERCIAL EXHIBITS

Fifty-eight outstanding Commercial Exhibits will be on display in the Zebra Room Monday and Tuesday from 9:00 a.m. to 5:00 p.m., and Wednesday from 9:00 a.m. until noon. Physicians are urged to inspect this great variety of Commercial Exhibits.

ROUNDTABLE LUNCHEONS

Roundtable Luncheons will meet daily on Monday and Tuesday from 12:00 noon to 1:30 p.m. in the Derrick Room, Biltmore Hotel. There will be only one Roundtable Luncheon each day at which the guest speakers of the preceding morning program will be the participants. The tickets are necessarily limited in number and should be purchased at the registration desk as early as possible.

MONDAY EVENING

There will be no special program on Monday evening in the belief that members would prefer to have one evening open for individual planning. Members will no doubt be interested in hearing Major Simons speak to the public at the Hall of Mirrors, Municipal Auditorium at 8:00 p.m. on "The Challenge of Space Medicine."

Distinguished Guest Speakers

PAUL C. AEBERSOLD, Ph.D.
Oak Ridge, Tennessee



Director of the Isotopes Division, U. S. Atomic Energy Commission since 1947. Received his A.B. in physics from Stanford University, 1932; M.A. in physics from the University of California in 1934 and Ph.D. in nuclear physics and biophysics, University of California, 1938. Certified Radiological Physicist, American Board of Radiology. Member of approximately 40 societies, committees and international congresses in his field.

Sponsor: Peter E. Russo, M.D., Oklahoma City.

JOHN W. HENDERSON, M.D.
Rochester, Minnesota



Associate Professor of Ophthalmology, University of Minnesota, Mayo Foundation; consultant, Section of Ophthamology, Mayo Clinic; ophthalmic surgeon, Worrall Methodist Hospital, Rochester. Minn. Graduated University of Nebraska School of Medicine. Certified by the Board of Ophthalmology.

Sponsor: Cove W. McClure, M.D., Oklahoma City.

E. GREY DIMOND, M.D.
Kansas City, Kansas



Professor and Chairman, Department of Medicine, University of Kansas Medical Center. Director, Cardiovascular Laboratories, University of Kansas Medical Center. Medical degree, Indiana University Medical Center. Diplomate, American Board of Internal Medicine, Sub-Board, Cardiology. Fellow, American College of Physicians.

Sponsor: Stewart G. Wolf, M.D., Oklahoma City.

N. FREDERICK HICKEN, M.D.
Salt Lake City, Utah



Associate Profesor Clinical Surgery, University of Utah Medical School, Consulting Surgeon U. S. Veterans Hospital; Surgeon, Latter Day Saints Hospital; Fellow. American College of Surgery; Fellow, International College of Surgeons; Founder Member, Southwestern Surgical Congress. Certified by the American Board of Surgery. Graduated University of Pennsylvania School of Medicine.

Sponsor: Joe Parker, M.D., Oklahoma City.

EDWARD C. HOLMBLAD, M.D.
Chicago, Illinois



Managing Director, Industrial Medical Association. Industrial physician and surgeon for various plants, railroads and industries in Chicago area 1920 to 1946, consultant 1946 to date; Senior attending surgeon (emeritus), St. Luke's Hospital, Chicago. Fellow of the American College of Surgeons.

Sponsor: Clifford C. Fulton, M.D., Oklahoma City.

WILLIAM T. LHAMON, M.D.
Houston, Texas



Professor and Chairman, Department of Psychiatry and Neurology, Baylor University College of Medicine; Consultant in Psychiatry, Veterans Administration Hospital. Psychiatrist-in-Chief, Jefferson Davis Hospital, Harris County, Texas. A.B. Degree, Stanford University. Medical Degree, Stanford University. Member, American Psychosomatic Society, American Sociological Society, American Psychopathological Society and Philadelphia College of Surgeons. Fellow, American Psychiatric Association and Diplomate, American Board of Neurology and Psychiatry.

Sponsor: Don Greaves, M.D., Oklahoma City.

PERRY B. HUDSON, M.D.
New York, N. Y.



Assistant Professor of Urology, Columbia University College of Physicians and Surgeons since 1951; formerly instructor in Urology, Johns Hopkins Medical School; Associate in Urology, Columbia University College of Physicians and Surgeons, and Damon Runyon Senior Clinical Research Fellow. Graduated from the University of Georgia School of Medicine.

Sponsor: Don Branham, M.D., Oklahoma City.

WILLIAM H. MASTERS, M.D.
St. Louis, Missouri



Associate Professor of Obstetrics and Gynecology, Washington University School of Medicine; Associate Obstetrician and Gynecologist, St. Louis Maternity and Barnes Hospital, and Washington University Clinics; Associate Gynecologist to St. Louis Children's Hospital and Consulting Gynecologist, St. Louis City Infirmary. Graduated University of Rochester School of Medicine and Dentistry, Certified by the American Board of Obstetrics and Gynecology. Member of approximately 12 professional and honorary societies.

Sponsor: Joseph W. Kelso, M.D., Oklahoma City.

THEO. C. PANOS, M.D.
Galveston, Texas



Professor of Petiatrics, University of Texas Medical Branch in Galveston. B.A. State University of Iowa; M.D., State University of Iowa. Pediatric residency University of Minnesota. Certified by the American Board of Pediatrics.

Sponsor: Ben H. Nicholson, M.D., Oklahoma City.

MAJOR DAVID G. SIMONS, M.D.
Almagordo, New Mexico



David G. Simons, M.D., Chief of the Space Biology Branch of the Aero Medical Field Laboratory at Holloman Air Development Center near Alamogordo, New Mexico.

Major Simons received a B.S. degree in chemistry in 1943 from Franklin and Marshall Medical College in Philadelphia and was graduated with an M.D. degree in 1946. He is certified by the American Board of Preventive Medicine in the specialty of Aviation Medicine.

MESSAGE CENTER

A complete message center service will be provided for your convenience at the Annual Meeting in Oklahoma City May 7-9. This message center is a service of the Oklahoma City Chapter of the Medical Service Society of America. The service will handle your incoming calls and every effort will be made to locate you as rapidly as possible upon receipt of a call. It will also assist you in locating other regstered members and guests.

Each O.S.M.A. member will receive a card soon listing the telephone numbers of the message center. Please leave this at your office so that your office will know how to reach you.

Scientific Program

MONDAY, *May 7, 1956*

JOE DUER, M.D., Woodward, Presiding

9:00-10:00 a.m. TELEVISION
Cases of Corrective Surgery
Department of Orthopedics, University of Oklahoma School of Medicine

10:00 a.m. PROSTATIC CANCER
Perry B. Hudson, M.D., New York City

10:30 a.m. HUMAN TOLERANCE TO ACCELERATION
Maj. David G. Simons

11:00 a.m. FRONTIERS IN PSYCHIATRY
William T. Lhamon, M.D., Houston, Texas

11:30 a.m. TREATMENT OF EXOPHTHALMOS FROM THE VIEWPOINT OF THE OPHTHALMOLOGIST
John W. Henderson, M.D.. Rochester, Minn.

12:00-1:30 p.m. ROUNDTABLE LUNCHEON
James F. Hammarsten, M.D., Oklahoma City, Presiding

HOPE ROSS, M.D., Enid, Presiding

1:30 p.m. ADRENALECTOMY FOR METASTATIC CARCINOMA
Perry B. Hudson, M.D., New York City

2:00 p.m. THE USE OF CONTACT LENSES AND KERATOPLASTY AND THE MANAGEMENT OF CORNEAL ABNORMALITIES
Charles A. Royer, M.D., Oklahoma City

2:20 p.m. DETECTION OF LIFE STRESS
William T. Lhamon, M.D., Houston. Texas

2:50 p.m. THE MANAGEMENT OF NEPHROSIS IN CHILDREN
Theo. C. Panos, M.D., Galveston, Texas

3:20 p.m. THE POISON INFORMATION CENTER AS AN AID TO THE PRACTICING PHYSICIAN
H. V. L. Sapper, M.D., Oklahoma City

3:40 p.m. THE CLINICAL MANAGEMENT OF HODGKIN'S DISEASE
Walter E. Brown, M.D., Tulsa

8:00 p.m. THE CHALLENGE OF SPACE MEDICINE
Maj. David G. Simons

TUESDAY, *May 8, 1956*

CHARLES E. GREEN, M.D., Lawton, Presiding

9:00-10:00 a.m. TELEVISION—*IN COLOR*

9:00 a.m. Proctology Clinic
Department of Proctology, University of Oklahoma School of Medicine

9:20 a.m. Dermatology Clinic
Department of Dermatology, University of Oklahoma School of Medicine

9:40 a.m. Pediatric Clinic
Department of Pediatrics, University of Oklahoma School of Medicine

10:00 a.m. THE RECOGNITION AND MANAGEMENT OF INTESTINAL OBSTRUCTIONS
N. Frederick Hicken, M.D., Salt Lake City, Utah

10:30 a.m. THE HOME APPLICATION OF PHYSICAL MEDICINE REHABILITATION
Shelby G. Gamble, M.D., Oklahoma City

11:00 a.m. DEVELOPMENT IN THE MEDICAL USE OF RADIOISOTOPES
Paul C. Aebersold, Ph.D., Oak Ridge, Tenn.

11:30 a.m. THE THIRD SEX—NEUTRAL GENDER
William H. Masters, M.D., St. Louis, Mo.

12:00-1:30 p.m. ROUNDTABLE LUNCHEON
Don H. O'Donoghue, M.D., Oklahoma City, Presiding

WAYNE STARKEY, M.D., Altus, Presiding

1:30 p.m. SURGICAL DISORDERS OF THE PANCREAS
N. Frederick Hicken, M.D., Salt Lake City, Utah

2:00 p.m. OPTIC NEUROPATHY OF GRAVE'S DISEASE
John W. Henderson, M.D., Rochester, Minn.

2:30 p.m. OCCUPATIONAL MEDICINE'S RELATIONSHIP AND CHALLENGE TO ALL PHYSICIANS
Edward C. Holmblad, M.D., Chicago, Ill.

3:00 p.m. THE INFERTILE COUPLE
William H. Masters, M.D., St. Louis, Mo.

3:30 p.m. HOW TO SET UP A PROGRAM FOR CLINICAL USE OF RADIOISOTOPES
Paul C. Aebersold, Ph.D., Oak Ridge, Tenn.

WEDNESDAY, *May 9, 1956*

RICHARD STOLL, M.D., Chickasha, Presiding

9:00 a.m. THE MANAGEMENT OF URETERAL CALCULI
Donald D. Albers, M.D., Oklahoma City

9:20 a.m. MANAGEMENT OF THE PULMONARY INFILTRATE
Charles M. Harvey, Jr., M.D., Oklahoma City

9:40 a.m. THE VOICE OF THE NEWBORN
G. R. Russell, M.D., Tulsa

10:00 a.m. THE CUFF AND I—OR—HYPERTENSION IS A MANY-SPLINTERED THING
E. Grey Dimond, M.D., Kansas City, Kansas

10:30 a.m. CLINICAL CONSIDERATIONS OF MECKEL'S DIVERTICULUM
Edward L. Moore, M.D., Tulsa

11:00-12:30 p.m. CLINICAL PATHOLOGICAL CONFERENCE
E. Grey Dimond, M.D., Kansas City, Kansas and
Howard C. Hopps, M.D., Oklahoma City

(See Opposite Page)

SPECIAL MEMBERSHIPS

Life Membership

Petitions for Life Membership have been filed in the Executive Office for the following and the Council recommends their approval by the House of Delegates:

James H. Neal, Sr., M.D., Tulsa
William J. Bryan, M.D., Tulsa
Delbert O. Smith, M.D., Tulsa
F. L. Nelson, M.D., Tulsa
Harry Dale Murdock, M.D., Tulsa
Ernest W. Reynolds, M.D., Tulsa
J. Sherwood Jacoby, M.D., Commerce
W. G. Hathaway, M.D., Lone Grove
J. L. Cox, M.D., Ardmore
A. H. Bungardt, M.D., Cordell
C. B. Taylor, M.D.. Oklahoma City
Floyd Gray, M.D., Oklahoma City

Honorary Membership

Petitions for Honorary Membership have been filed in the Executive Office for the following and the Council recommends their approval by the House of Delegates:

Edward A. Abernathy, M.D., Altus
Fred A. Hudson, M.D.. Enid
A. S. Risser, M.D., Blackwell

CLINICAL PATHOLOGIC CONFERENCE

E. GREY DIMOND, M.D., HOWARD C. HOPPS, M.D.

Patient: U. W., 23 year Negro male.

Chief Complaints: Sore throat and fever—one month; frontal headaches—three and one-half weeks; weakness—three and one-half weeks; nausea and vomiting—one week.

Present Illness: The patient was considered to be in essentially good health until approximately a month before hospital admission, at which time he had a sore throat and fever (temperature not taken). Shortly after this he began to develop frontal headaches. At about the same time he began making loud "snoring" sounds in his sleep and sounded "all choked up," according to his wife. Approximately three weeks before hospital admission the patient woke his wife one morning at 6 o'clock with a seizure characterized by jerking movements of arms, neck and jaw muscles and bodily rigidity. The seizure lasted 15 minutes. There was no incontinence of urine or feces. The patient was hospitalized locally for four days at which time examination revealed blood pressure 180/90, "an old thrombus in one of the retinal vessels," fasting blood glucose of 240 mg./100 ml. (subsequently decreasing to 140 mg./100 ml.) a positive "blood serology," but negative spinal fluid.

However, from this time on the patient was too weak to work—in fact he could not get up unless he was assisted. One week before his admission to University Hospital he lost his appetite, developed nausea, and began to vomit frequently. On the evening of this day he had jerking movements of the right arm, which lasted for two minutes. He became restless and had a "staring look." Within the next two days his personality changed considerably and he developed paranoid manifestations and visual hallucinations. During this seven day period before admission to the hospital, he took no food by mouth. During the two days just prior to hospital admission he did not urinate.

Past History: The patient was said to have have had syphilis at the age of 14, for which he received penicillin therapy. Approximately eight months ago he had a penile chancre and began penicillin therapy, but discontinued this after two weeks. It is said that the sore healed, but that later he had a rash all over his body which cleared spontaneously after several days. Approximately two months before his present illness began a "routine test" revealed positive serology and he was again treated with penicillin (amount and time unknown).

Family & Social History: The patient's mother died at age 45 of heart disease. Father is living and well. One half-sister has had attacks of "rheumatism." The patient has been married one year. His wife is 35 years old. They have no children.

Systemic History: The patient's wife states that she has noted intermittent swelling of the patient's face for two or three days at a time for approximately a year. Also, that the patient had had small pimples on the back of his hands for about a year and that he has had pustular lesions on the arches of his feet for approximately three weeks.

Physical Examination: Revealed a thin, apprehensive, belligerent patient who was uncooperative and who exhibited moderately severe dehydration. Most of the time his jaws were kept tightly closed. Sclerae were "muddy"—questionably icteric. The nose and throat were not remarkable except for accumulation of mucous and some drying of mucous membranes of the lips and the nose. Funduscopic examination was very difficult, but no papilledema was noted. Breathing was deep and relatively rapid. The lungs were clear to percussion and auscultation. There was no cardiomegaly. There was sinus tachycardia of 110/min. BP was 150/100. There was a systolic murmur of blowing quality heard over the precordium (not described further). It is difficult to evaluate the abdomen because of tenseness of the patient's muscles, however no abnormalities were recorded. The urinary bladder was per-

cussed at the level of the umbilicus. The extremities all moved equally well. Deep tendon reflexes were slightly hyperactive on the right side. Sensory examination was unsuccessful. There was no response of toes to plantar stimulation. Muscular strength and coordination were difficult to evaluate because of the patient's lack of cooperation. However, the strength appeared to be approximately normal. On one occasion there was noticed sustained patellar clonus on the right side. Rectal temperature was 99.8°.

Laboratory Data: On admission Hb. was 5.8 gm. per cent; hematocrit 15 per cent and RBC's 2.01 million/cu.mm.; WBC'c were 8,750 with granulocytes 90, lymphocytes 6, and monocytes 4 per cent. Urine was yellow and clear with sp. gr. of 1.015 and pH of 7.5. There was 4+ proteinuria; no acetone or sugar was present. There were several RBC's/h.p.f. and several epithelial cells/h.p.f. Fasting blood sugar was 104 mg. per cent. Chlorides were 80 mEq/1. Sodium 148 mEq/1; potassium 6 mEq/1 and CO_2 combining power 20 mEq/1. Blood urea nitrogen was 48 mg. per cent. VDRL and a Kolmer Wasserman were negative. A chest film taken in the Outpatient Department just prior to admission was reported as "negative." Skull films were "not entirely satisfactory due to patient's inability to cooperate. No definite intracranial pathology identified."

Hospital Progress: A Foley catheter was inserted and 900 ml. of urine were obtained. Approximately two hours after admission 1000 ml. of five per cent dextrose in normal saline was started intravenously. This was followed by a liter of 10 per cent invert sugar in normal saline. Subsequently 1000 ml. five per cent dextrose in water was given. Approximatly 15 hours after hospital admission the patient had a grand mal type seizure which was relieved by amytal intravenously. Approximately 15 minutes later he appeared to be on the verge of another seizure, then gasped and stopped breathing.

Chi Square

(Continued from Page 106)

be ascribed to chance. Whereby, if "P" is less than 0.05 (down 0.01), then it is likely that they do differ more than might be ascribed to chance. The smaller the value of "P" the smaller is the probability that the differences noted are due to chance.

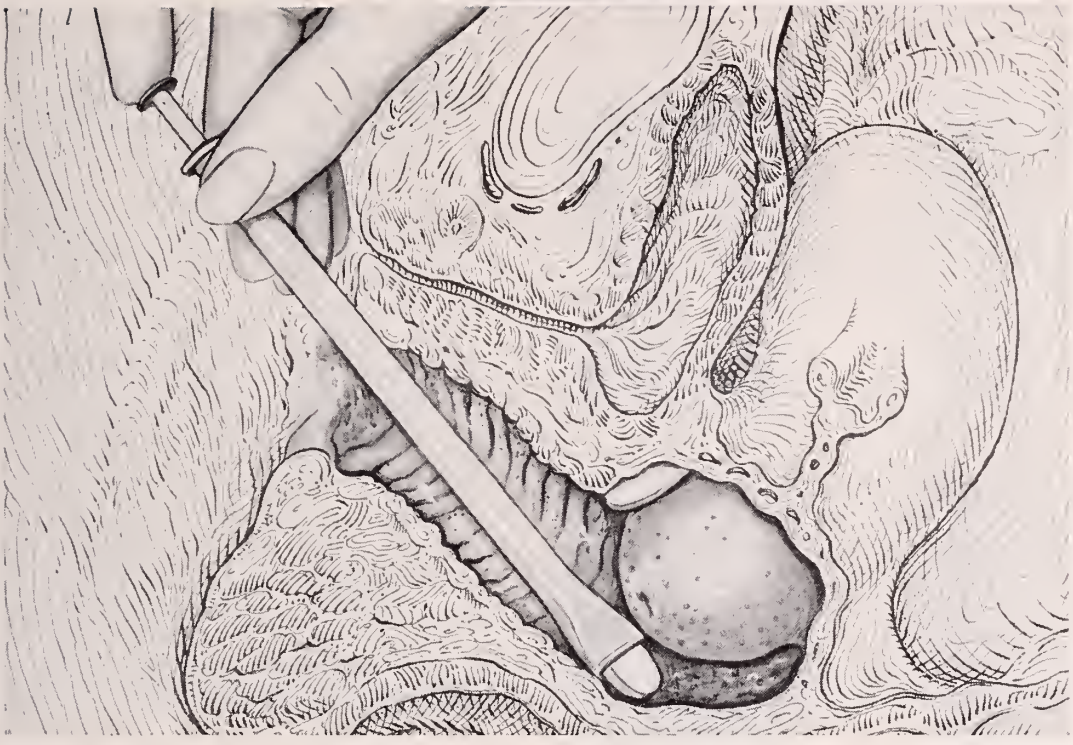
Consequently, in our example of "P" equals 0.05 the difference in the incidence of prematures by day of the week was "significant" and the likelihood of it being caused by chance alone was one in twenty. Statisticians regard one in twenty as the breaking point between observations that are significant and those that could be due to chance alone. We conclude that these results with all other relevant factors being equal, some days of the week have a lower incidence of premature deliveries than others.

In concluding these articles on statistical methods these final pleas are made:

If you are going to report the results of a method of treatment, analysis, etc., have these checked for statistical significance before they are released.

2. If you read an article reporting a different or new method of treatment, check to ascertain the statistical validity of the author's results before you go off the "deep end" for the newer method, because it may not be worth using.

FLORAQUIN® VAGINITIS REGIMEN



New Intravaginal Applicator for Improved Treatment of Vaginitis

The restorative treatment of vaginitis with Floraquin is now further improved by a new aid to tablet insertion. Faulty insertion is no longer a failure factor in therapy.

The new Floraquin applicator is designed for simplified insertion of Floraquin tablets by the patient. This plunger device, made of smooth unbreakable plastic, places the Floraquin tablets in the fornices and thus assures coating of the entire vaginal mucosa as the tablets disintegrate. The patient inserts two Floraquin tablets with the applicator in the morning and also two tablets at night, with treatment being continued through at least two menstrual periods. During menstruation it is desirable to increase medication to eight tablets daily to combat the alkalinity of the menstrual flow.

Warm acid douches (2 ounces of 5 per cent acetic acid or white vinegar to 2 quarts of warm water) may be taken as often as desired for hygienic purposes.

Floraquin contains Diodoquin® (diiodohydroxyquinoline, U.S.P.), the safe and effective protozoacide and fungicide. Lactose, anhydrous dextrose and boric acid are included to help restore the normal acid pH of the vaginal secretions. Such an acid vaginal medium then encourages the growth of normal flora and makes the environment unfavorable for pathogens.

A Floraquin applicator is supplied with each box of 50 (a new package size) Floraquin tablets. G. D. Searle & Co., Research in the Service of Medicine.

New Flaraquin Applicatar and cammercial package of 50 Flaraquin tablets available an request ta . . .

SEARLE

P. O. Box 5110, B
Chicaga 80, Illinois

Woman's Auxiliary



Mrs. Mohler



Mrs. Livingston



Mrs. Lawson



Mrs. O'Connell

SUNDAY, MAY 6, 1956
THEME: Active Leadership in Community Health

All members and visiting physicians' wives are welcome to all activities.

1:00 p.m. to 4:00 p.m. — Registration — Mezzanine Floor, Skirvin Hotel.

3:00 p.m. to 5:00 p.m.—TEA—Honoring Mrs. Mason G. Lawson, President of the Woman's Auxiliary to the American Medical Association, and Mrs. John O'Connell, President of the Woman's Auxiliary to the Southern Medical Association. Home of Mrs. Gerald Rogers, 524 N.W. 15th. Courtesy of the Woman's Auxiliary to the Oklahoma County Medical Society.

8:00 p.m.—EXECUTIVE BOARD MEETING—Crystal Room, Skirvin Hotel, Mrs. E. Clyde Mohler, Presiding.

MONDAY, MAY 7, 1956
THEME: Active Leadership in Community Health

PAST PRESIDENT'S BREAKFAST

8:30 a.m.—Past President's Breakfast—Blue Room, Skirvin Hotel, Mrs. Carroll Pounders, Hostess.

9:00 a.m. to 4:00 p.m.—REGISTRATION—Mezzanine Floor, Skirvin Hotel—Coffee and Rolls served, 9:00 to 10:00 a.m.

10:00 a.m.—GENERAL MEETING—Mrs. E. Clyde Mohler, Presiding. Venetian Room, Skirvin Hotel.

CALL TO ORDER — Mrs. E. Clyde Mohler, President of the Woman's Auxiliary to the Oklahoma State Medical Association.

INVOCATION—Mrs. R. Q. Goodwin, Oklahoma City, Oklahoma.

PLEDGE OF LOYALTY—Mrs. J. F. York, Madill, Oklahoma.

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

WELCOME—Mrs. Charles Freeman, President-Elect of the Woman's Auxiliary to the Oklahoma County Medical Society.

GREETINGS—Dr. R. Q. Goodwin, President of the Oklahoma State Medical Association.

ROLL CALL BY COUNTIES—Mrs. Virgil Ray Forester, Secretary-Treasurer of the Woman's Auxiliary to the Oklahoma State Medical Association.

READING AND ADOPTION OF MINUTES—Mrs. Virgil Ray Forester.

TREASURER'S REPORT.

INTRODUCTIONS—State Officers, Committee Chairmen, Pages, Convention Chairman, and Guests.

GUEST SPEAKER—Mrs. Mason G. Lawson, Little Rock, Arkansas, President of the Woman's Auxiliary to the American Medical Association.

ADDRESS: "Active Leadership in Community Health."

GUEST SPEAKER—Mrs. John O'Connell, St. Louis, Missouri, President Woman's Auxiliary to the Southern Medical Association.

ADDRESS: "Duties of Doctors' Wives in the Community."

REPORT OF NOMINATING COMMITTEE—Mrs. L. Gordon Livingston, President-Elect, Woman's Auxiliary to the Oklahoma State Medical Association.

MEMORIAL SERVICE—Mrs. Sanford Matthews, Oklahoma City.

ANNOUNCEMENTS — Mrs. Howard Shrobe, Convention Chairman.

1:00 p.m.—LUNCHEON—STYLE SHOW by Gilpins and Kathryn Lipe's—Persian Room, Skirvin Tower, Mrs. James P. Luton, President, Woman's Auxiliary to the Oklahoma County Medical Society, Presiding.

ORGAN—Mrs. Virgil Ray Forester.

INVOCATION—Mrs. W. R. Cheatwood, Duncan, Oklahoma.

TUESDAY, MAY 8, 1956

THEME: Active Leadership in Community Health

9:00 a.m. to 12:00 p.m.—REGISTRATION—Mezzanine Floor, Skirvin Hotel.
Coffee and Rolls served 9:00 a.m. to 10:00 a.m.

10:00 a.m.—GENERAL MEETING—Mrs. E. Clyde Mohler, Presiding, Venetian Room, Skirvin Hotel.

CALL TO ORDER — Mrs. E. Clyde Mohler, President.

INVOCATION—Mrs. George Garrison, Oklahoma City.

PLEDGE OF LOYALTY—Mrs. T. A. Ragan, Norman, Oklahoma.

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

REPORT OF CREDENTIALS—Mrs. George Bozalis, Oklahoma City.

ROLL CALL OF VOTING DELEGATES—Mrs. Virgil Ray Forester.

GUEST SPEAKER—Dr. H. M. McClure, President-Elect, Oklahoma State Medical Association.

PRESENTATION OF REPORTS OF STATE OFFICERS AND COUNTY PRESIDENTS.
UNFINISHED BUSINESS.
NEW BUSINESS.

REPORT OF BUDGET AND FINANCE COMMITTEE—Mrs. John Cunningham, Oklahoma City.

RESOLUTIONS—Mrs. George Garrison, Oklahoma City.

ELECTION OF OFFICERS AND DELEGATES.

INSTALLATION OF OFFICERS—Mrs. W. R. Cheatwood, Past-President of the Woman's Auxiliary to the Oklahoma State Medical Association.

1:00 p.m.—LUNCHEON — Balinese Room, Skirvin Hotel.

GUEST SPEAKER—Mr. W. P. Atkinson, Oklahoma City.

ADDRESS—"Atoms for Peace."

POST-CONVENTION SCHOOL OF INSTRUCTION AND BOARD MEETING, Mrs. L. Gordon Livingston, Presiding.

6:00 p.m. to 1:00 a.m.—ANNUAL PRESIDENT'S INAUGURAL BALL—Social Hour, Dinner and Dancing, Persian Room, Skirvin Tower, Ted Weems' Orchestra.

GROUP LIFE NEWS

The Oklahoma State Medical Association and the Massachusetts Mutual Life Insurance Company are pleased to announce the group life policy went into effect March 15.

The response to the life insurance program was gratifying. Applications will still be accepted without physical examination for a limited time only.

Mail applications to:

Oklahoma State Medical Association
INSURANCE TRUST
1240 First National Building
Oklahoma City 2, Oklahoma.

Your promptness will be appreciated

Commercial Exhibits

A. S. ALOE & COMPANY
St. Louis, Missouri **Booth 39-D**

Visit Booth 39-D where the A. S. Aloe Company will have on display a cross-section of their most complete line of physician equipment and supplies. On hand to greet you will be your Aloe Representatives, Mr. Bill Jones and Mr. Gil Stapp. They will certainly appreciate the opportunity of discussing mutual items of interest with you.

AUDIO-DIGEST FOUNDATION
Glendole, California **Booth 13**

Audio-Digest Foundation—a subsidiary of the California Medical Association—gives the busy physician an effortless tour through the best of current medical literature each week. This medical tape-recorded "newscast" —compiled and reviewed by a professional Board of Editors—may be heard in the physician's automobile, home or office. The Foundation also offers medical lectures by nationally-recognized authorities.

AYERST LABORATORIES
New York, New York **Booth 30**

AYERST LABORATORIES will feature "PREMARIN" Intravenous, which is currently receiving wide attention for its use in controlling spontaneous hemorrhage. "Physicians are cordially invited to visit Booth No. 30 to discuss 'PREMARIN' Intravenous, or any other Ayerst products in which they are interested." Representatives: Elmer Trueblood, Charles Dinehart, Ray Hageman, and Keith Parrett.

BLUE CROSS-BLUE SHIELD
Tulso, Oklohomo **Booth 66**

The Blue Cross-Blue Shield exhibit will be a "rest haven" for physicians in between meetings. Information and explanation of any phase of the Oklahoma program will be given cheerfully. Comments and suggestions of physician delegates are always welcome. All are invited to "stop by to chat and rest." Representative: Carl E. Behle.

CONNIE'S PRESCRIPTION SHOP
Oklohomo City, Oklohoma **Booth 23**

Our booth will be a good-will feature. We will display items in which the Medical Association might be interested, and will give away pencils, matches, etc. Representatives will be Miss Juanita Mosley, Mrs. Maurice Barr. Mrs. Anne Duncan, Mr. H. G. Archerd, and Mr. C. J. Masterson.

CREDIT SERVICE
Oklohomo City, Oklahomo **Booth 48**

CREDIT SERVICE, with 21 years experience, is the Oklahoma City member of the National Association of Medical and Dental Bureaus, an organization designed to study the problems of credit of the medical profession throughout the nation. The personnel at this booth are men of experience in collection problems and will be glad to discuss with you any problems you may have relative to the collection of your delinquent accounts. 2100 bonded members of the American Collectors Association are eminently qualified to represent you throughout the United States, Canada, Alaska, Hawaii, and Mexico. Representatives: Robert R. Sesline, Robert F. Hughes, and Harold Fudge.

S. H. CAMP & COMPANY
Jockson, Michigon **Booth 32**

S. H. CAMP & COMPANY hav been appointed sole distributor of "Blair Braces & Appliances." These and other new items are on display. You should stop at their booth—No. 32—and check on the latest developments in Camp Supports, together with the other new items adaptable in your practice. Camp products best meet your exacting requirements and are immediately available through your local Authorized Camp Dealer. Patients appreciate their comfort, quality and low cost. Representatives: L. L. Carr and Miss Mildred Agnelly.

CARNATION COMPANY
Los Angeles, California **Booth 21**

"Carnation Company presents Carnation Instant Non-fat Dry Milk Solids, the *first* and only true instant non-fat dry milk. The 'Magic Crystals' process, which has resulted in instant solubility and fresh flavor, has won the 1955 Food Engineering Award for the year's major advance in food processing. We cordially invite you to sample this fine product; an excellent, economical source of protein." Representatives: Richard G. Robards, William J. Miller, Rex O. Stubbs, Edwin E. Ward, Charles M. Diets.

CIBA PHARMACEUTICAL PRODUCTS, INC.
Summit, New Jersey **Booth 65**

CIBA is featuring RITALIN, a new mild stimulant-antidepressant. RITALIN raises depressed patients to normal levels of psychomotor activity without amphetamine-like over-stimulation or depressive rebound. Representatives will be present to answer queries on this very effective agent.

COCA COLA COMPANY
Oklahoma City, Oklahoma **Booth 28**

"Ice-cold Coca-Cola served through the courtesy and cooperation of the Oklahoma Coca-Cola Bottling Company and The Coca-Cola Company." Representatives to be announced later.

DOHO CHEMICAL COMPANY
New York, N.Y. **Booth 16**

AURALGAN, the ear medication for the relief of poin of Otitis Media and removal of Cerumen; NEW OTOSMOSAN, the effective, non-toxic ear medication which is Fungicidal and Bactericidal (gram negative-gram positive) in the suppurative and aural dermatomycotic ears; RHINALGAN, the nasal decongestant which is free from systemic or circulatory effect and equally safe to use on infants as well as the aged. Mallon Chemical Corporation, a Subsidiary is also featuring: RECTALGAN, the liquid topical anesthesia, also for relief of pain and discomfiture in hemorrhoids, pruritus and perineal suturing. DERMOPLAST, in an aerosol freon propellent spray for fast relief of surface pain, itching, burns and abrasions. Also Obs. & Gyn. use.

Representative: Louis Cassell.

WE CORDIALLY INVITE YOUR INQUIRY for application for membership which affords protection against loss of income from accident and sickness (accidental death, too) as well as benefits for hospital expenses for you and all your eligible dependents.



EAGLE UNIFORM MANUFACTURING COMPANY
Oklahoma City, Oklahoma **Booth 15**

We will have on display samples of our professional garments and one of our sewing machines so as to show some of the construction of these garments. Representatives: W. P. (Bill) Hiller, Cecil Gulihur, and Edna Lyon.

EATON LABORATORIES
Norwich, New York **Booth 27**

For the treatment of Trichomonas vaginalis vaginitis and the accompanying secondary bacterial infections, we now have available Tricofuron (T.M.) Vaginal Suppositories and Powder. The latest clinical data on Furadantin(R) in the form of tablets and as Furadantin Oral Suspension in treating urinary tract infections and prostatitis will be available. Within 30 minutes after ingestion of this drug, the urine becomes strongly antibacterial. Dosage forms of the topical antibacterial Furacin(R) of special interest include Furacin Soluble Powder for painless application to wounds and burns, Furacin Vaginal Suppositories for cervicitis and vaginitis and in cervicovaginal surgery; and Furacin Urethral Suppositories.

Representatives: H. B. Walton, W. C. Nelson, and S. S. Karafin.

H. G. FISCHER & COMPANY
Franklin Park, Illinois **Booth 16**

Our exhibit will feature the "Spacesaver" Combination Radiographic-Fluoroscopic Unit and Examining Table with its remarkable new automatic control and our new Ultrasonic Generator with which the medical profession is getting sensational results. Representatives in attendance will welcome an opportunity to give demonstrations and to quote today's low prices. You will be under no obligation. Your visit will be appreciated. Representative: A. L. Melanson.

FLINT-EATON & COMPANY
Decatur, Illinois **Booth 24**

Flint, Eaton presents Ferrolip, a new chelate complex of iron. Chelated iron, as in Ferrolip, is resistant to all usual chemical forces serving to precipitate iron and to produce iron intolerance; yet the chelated iron in Ferrolip is completely soluble and readily available for uptake along the entire gastrointestinal tract. Visit the Flint, Eaton and Company booth to hear of chelation as it applies to iron therapy. Representatives: Robert Honey, Frank Bland, and Dr. C. R. Kemp.

HOLLAND-RANTOS COMPANY, INC.
New York, N.Y. **Booth 26**

Physicians interested in Medical Contraception are invited to discuss with Holland-Rantos representatives latest information on laboratory and clinical data concerning efficacy of KOROMEX products.

Also on display will be the trichomonacidal, bactericidal and fungicidal NYLMERATE JELLY and SOLUTION CONCENTRATE along with HOLLANDEX medicated skin ointment and other products. Representatives: Charles S. Donahue, Robert M. Croston, and James T. Bankhead.

HARRIS-UPHAM & COMPANY
Oklahoma City, Oklahoma **Booth 45**

Harris, Upham & Co., members of the New York Stock Exchange, welcomes the opportunity to discuss investment securities with members of The Oklahoma State Medical Association at our booth No. 45. Various pamphlets designed for your benefit will be available to you. Mr. B. G. McCall, manager of our Oklahoma City office will be in charge, with a registered representative on duty.

JULIUS SCHMID, INC.
New York, N. Y. **Booth 42**

An interesting and informative exhibit featuring RAMSES FLEXIBLE Cushioned Diaphragm; RAMSES Vaginal Jelly; VAGISEC Jelly and Liquid, two new products embodying "Carlendacide," the recent development of Carl Henry Davis, M.D., and C. G. Grand for vaginal trichomoniasis therapy; and XXXX (Fourex) Skin Condoms, RAMSES and SHEIK Rubber Condoms for the control of trichomonal re-infection.

R. P. KINCHELOE COMPANY
Dallas, Texas **Booth 14**

"The R. P. Kincheloe Company, distributors of Keleket X-ray apparatus, Cambridge electrocardiographs and Liebel-Flarsheim electromedical equipment will have experi-

enced engineers in attendance at booth No. 14 to welcome its many friends and customers. Of particular interest to all convention-goers will be a demonstration of the new Cambridge Audio-Visual Heart Sound Recorder. See heart sounds, hear them, record them simultaneously! Don't miss this fascinating exhibit." Representatives to be announced later.

ELI LILLY & COMPANY
Indianapolis, Indiana **Booth 34**

You are cordially invited to visit the Lilly exhibit located in space No. 34. The display will contain information on recent therapeutic developments. Lilly sales people will be in attendance. They welcome your questions about Lilly products. Representatives: W. N. Burks, Jr., T. C. Lout, Bert Tunnell, Montell Watson, E. W. Griffith.

J. B. LIPPINCOTT COMPANY
Philadelphia, Pennsylvania **Booth 54**

"J. B. Lippincott Company presents, for your approval, a display of professional books and journals geared to the latest and most important trends in current medicine and surgery. These publications, written and edited by men active in clinical fields and teaching, are a continuation of more than 100 years of traditionally significant publishing."

J. A. MAJORS COMPANY
New Orleans, Louisiana **Booth 31**

The latest publications of the W. B. Saunders Company will be available for your examination. The new second edition of Sodeman—PATHOLOGIC PHYSIOLOGY, 1956 CURRENT THERAPY, new sixth edition of Christopher—TEXTBOOK OF SURGERY, Hinshaw and Garland — DISEASES OF THE CHEST, and new second edition of Wolff—E. K. G. are some of the most recent publications that will be on display. Representatives: Bruce Thompson and Jack McClendon.

MEAD JOHNSON COMPANY
Evansville, Indiana **Booth 64**

The new Deca vitamin family for the vital first decade of life will be exhibited by Mead Johnson & Company in booth No. 64. Included in the new Deca family of vitamin specialties are: Deca-Vi-Sol, for dropper dosage, a fruit flavored solution for infants and toddlers; Deca-Mulcin, for teaspoon dosage, a pleacantly-flavored liquid for preschool children of two to six years; and Deca-Vi-Caps, small, easily-swallowed capsules, for school-agers of six to 10 years. All three Deca vitamin specialties supply 10 nutritionally significant vitamins including A, C, and D, plus seven important B vitamins. Representatives: J. D. Parks, and G. Richard Brown.

MEDCO PRODUCTS COMPANY
Tulsa, Oklahoma **Booth 49**

The MEDCOLATOR Stimulator, for the stimulation of innervated muscle or muscle groups ancillary to treatment by massage, is a low volt generator that will generate plenty of your interest. Electrical muscle stimulation is a valuable form of rehabilitation therapy. Be sure to visit our booth for a personal demonstration. Representatives to be announced later.

MELTON COMPANY, INC.
Oklahoma City, Oklahoma **Booth 25**

We will exhibit the new as well as the old instruments. We invite all the doctors to visit our booth and browse. Representatives: Joe Reiter and Ford Dixon.

The Melton Company of Oklahoma City and Tulsa will have in their display many items of interest for the visiting Doctors. Hamilton Furniture, Vitallium, Ritter, Leitz, ABCO, Sklar, Burdick EKG, Ultrasound, Birtcher and many other familiar and new items. Come visit with us. Representatives: Howard E. Melton, Bill Hughes, Tom Brennan, Joe Snider, J. B. Dixon, Murray Myers, Roy Cody, and Bob Andrews.

MIDWEST SURGICAL SUPPLY COMPANY
Oklahoma City, Oklahoma **Booth 59-B**

We wish to welcome the profession and invite you to visit our booth where general medical and surgical equipment and supplies will be displayed. Representatives: Kermit Howell, Clint Jennings and Harvey Vorse.

ORTHO PHARMACEUTICAL CORPORATION
Raritan, New Jersey **Booth 37**

ORTHO cordially invites you to booth 37. Featured will be DELFEN vaginal cream, Ortho's most spermicidal contraceptive. Delfel vaginal cream has the highest concentration of a new, most potent, nontoxic spermicide. Since the spermicide is in the water phase of an oil-in-water emulsion it rapidly invades seminal fluids killing sperm on contact. It is emollient and nonirritating to vaginal tissues. Ortho representatives will be glad to discuss this product with you.

PARKE DAVIS & COMPANY
Detroit, Michigan **Booth 53**

Medical service members of our staff will be in attendance at our exhibit for consultation and discussion of various products of particular interest to members of the Association. Important specialties, such as Penicillin S-R, Benadryl, Chloromycetin Ambodryl, Dilantin Suspension, Vitamins, Oxycel, Milontin, Amphedase, Thrombin Topical, etc., will be featured. You are cordially invited to visit our exhibit. Representatives: D. L. Porter and T. C. Lee.

PET MILK COMPANY
St. Louis, Missouri **Booth 12**

We will be pleased to have you stop and discuss the variety of time-saving material available to busy physicians. Our representatives will be on hand to discuss the merits of "Pet" Evaporated Milk for infant feeding and INSTANT "Pet" Nonfat Dry Milk for special diets. A miniature "Pet" Evaporated Milk can will be given to all visitors.

PFIZER LABORATORIES
Brooklyn, New York **Booth 50**

The Pfizer exhibit again will be in the spotlight with its new and original concept of anti-stress, anti-infective therapy-TETRACYN S.F. and TERRAMYCIN S. F. (Stress Fortified). Also, the complete line of Pfizer antibiotics and STERAJET as well as the new specialties, BONAMINE, TYZINE, TOCLASTE and the complete line of steroid hormones including CORTRIL and the latest corticosteriod STERANE (brand of prednisolone).

Representatives: Arnold Belding and John Stone.

PIED PIPER SHOE COMPANY
Oklahoma City, Oklahoma **Booth 46**

PIED PIPER SHOES—Complete line of juvenile footwear in both normal and wedged, long counter construction—Straight lasts—Made on straight lasts by exclusive process which eliminates filler between inner and outer sole, providing greater flexibility and maintained balance. Lasts, construction and design features aimed towared complete practicality and maximum shape-holding ability developed as result of extensive, continuous program of research, study and product improvement. Display will include cut-open shoes to show all construction features.

R. J. REYNOLDS TOBACCO COMPANY
Winston-Salem, North Carolina **Booth 19**

"Welcome to the R. J. Reynolds Tobacco Company Exhibit! You are cordially invited to receive a cigarette case (monogrammed with your initials) containing your choice of CAMEL, CAVALIER King Size, or WINSTON, the distinctive new king size filter cigarette."

RIKER LABORATORIES, INC.
Los Angeles, California **Booth 41**

Riker Laboratories, Inc., is pleased to present an entirely new type instrument for nebulizing solutions used in the treatment or relief of bronchial asthma. This instrument is known as a MEDIHALER ORAL ADAPTER. Two solutions, MEDIHALER-EPI and MEDIHALER-ISO in special containers with metered dose valves, have been made available for use with the MEDIHALER ADAPTER. Visit Booth No. 41 for full particulars and a demonstration of this revolutionary and efficient new method of administering relief to your asthmatic patients. Representatives: Charles R. Adams, and James R. Mathis.

A. H. ROBINS COMPANY, INC.
Richmond, Virginia **Booth 55**

The Robins exhibit features the Donnatal "family" of antispasmodics, including the original Tablets, Capsules, the versatile Elixir and the new Donnatal Extentabs, which provide all-day or all-night effects on single dosage; while the formula combined with B complex and indicated in the medical management of chronic fatigue states is available as Donnatal Plus. Also shown are Entozyme, Pabalate, Pabalate-Sodium Free

and the new Pabalate-HC (Pabalate with Hydrocortisone). Representatives: Ellsworth Draper and T. D. Rasco.

SABOLICH ORTHOPEDIC APPLIANCE COMPANY
Oklahoma City, Oklahoma **Booth 52**

Our Exhibit will include: All types of Artificial Limbs, Orthopedic Appliances and Surgical Corsets. Representatives: Lester J. Sabolich, Ray Buddin, Raymond Crawford, and Ella Brinson.

SCHERING CORPORATION
Bloomfield, New Jersey **Booth 51**

A cordial invitation is extended to the members of the Oklahoma State Medical Association to visit the Schering exhibit, Booth No. 51. The entire exhibit will be devoted to METICORTEN and METICORTELONE, the new corticosteroids for the treatment of rheumatoid arthritis, intractable asthma and other so-called collagen diseases. Extensive clinical and laboratory data demonstrating certain advantages of these new steroids over cortisone and hydrocortisone are shown. Representatives: H. Cooper and H. James.

SEALY MATTRESS COMPANY
Fort Worth, Texas **Booth 44**

The Sealy Posturepedic innerspring mattress, exhibited at the annual meeting of the Oklahoma State Medical Association, was designed in cooperation with leading orthopedic surgeons. The scientific firmness recommended by the orthopedic surgeons and built into every Sealy Posturepedic helps relieve morning backache caused by sleeping on a too-soft mattress. The Sealy Posturepedic has exclusive Comfort-Gard which automatically adjusts the body to comfortably correct sleeping posture regardless of how their day time posture may be. The companion piece to the Posturepedic is the matching foundation which has coil-for-coil support. When sold in sets, the Posturepedic carries a twenty year written guarantee. King size or extra length Posturepedic mattresses and foundations are sold at no increase in cost. Representative: Neil Barton.

G. D. SEARLE AND COMPANY
Chicago, Illinois **Booth 61**

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research. Featured will be Mictine, the new safe, non-mercurial oral diuretic; Vallestril, the new synthetic estrogen with extremely low incidence of side reactions; Banthine and Pro-Banthine, the standards in anti-cholinergic therapy; and Dramamine, for the prevention and treatment of motion sickness and other nauseas.

7-UP BOTTLERS OF OKLAHOMA
Oklahoma City, Oklahoma **Booth 40**

Booth No. 40 7-Up Bottlers of Oklahoma—Stop for A Fresh Up With 7-Up. Representatives: Harry Schroeder, Marie Harkins, Harley Ray, Charles McBay, Lee Roy Williams, and Mary Crews.

E. R. SQUIBB COMPANY
New York, N.Y. **Booth 62**

"E. R. Squibb & Sons has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the Medical Profession on new products or improvements on products already marketed. Representatives: W. A. Cates, S. E. Wilson, R. A. Grantham, B. J. Anderson.

ST. PAUL-MERCURY INDEMNITY COMPANY
St. Paul, Minnesota **Booth 63**

We have reserved Booth No. 63 in which we plan to have available various brochures and information concerning the medical program with the State Medical Association. A number of the members of the St. Paul Company's staff in Oklahoma City will be present to discuss the program with anyone who may wish to make inquiries. It is also planned to have photographs and other descriptive material available in the booth. Representatives: F. O. Cress and Gordon D. Gorney, M. J. Herod and G. L. Fransen.

TAYLOR LABORATORIES, INC.
Houston, Texas **Booth 22**

Products to be exhibited: ACTH (Council accepted gel and solution) DI-SUP (Prenatal tablet), MAINVITE (National Research Council recommended daily vitamin supplement), M.A.V. (Mineral and Vitamin elixir), NAUCAINE (A safe effective antinauseant). Representative: Jim Southerland.

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INTERPRETATION OF CERVICO-VAGINAL, ETC. (PAPANICOLAOU) SMEARS
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THE UPJOHN COMPANY
Kalamazoo, Michigan **Booth 36**

Members of the medical profession are invited to visit the Upjohn booth where members of The Upjohn Company professional detail staff are prepared to discuss subjects of mutual interest. Representatives: S. A. Sipe, V. E. Vandiver, J. R. Frye, and F. S. Mock.

U. S. VITAMIN CORPORATION
New York, N.Y. **Booth 35**

Exhibit features C.V.P., a water-soluble citrus bioflavonoid complex with ascorbic acid . . . for restoring and maintaining capillary integrity. Used experimentally against the "common cold" and other virus infections. Corrects or minimizes capillary abnormality or bleeding associated with diabetes, hypertension, epistaxis, purpura, gingivitis and certain forms of gastro-intestinal, rectal and vaginal bleeding. Professional samples and literature on C.V.P. and other of our nutritional specialties will be distributed at our booth. Representatives to be announced later.

WALLACE & TIERMAN, INC.
Belleville, New Jersey **Booth 20**

You are cordially invited to visit the Maltbie Exhibit to meet our representatives and discuss our ethical pharmaceautical products. Featured items will be DESENEX and SALUNDEK, the well-known fungicides; CHOLAN-HMB, for comprehensive biliary therapy; MALCOTRAN, the potent anticholinergic with wide margin of safety; and CALPURATE, for improved cardiac function and increased diuresis. Representatives: John C. Hands, Frank L. Rauch and Alan L. Stuvland.

WINTHROP-STEARNS, INC.
New York, N.Y. **Booth 33**

A. P. C. with Demerol: tables for potentiated pain relief. Each tablet contains aspirin 3 grains, phenacetin $2\frac{1}{2}$ grains, caffeine $\frac{1}{2}$ grain with Demerol hydrochloride 30 mg. A. P. C. with Dermol tablets combine marked potentiation of analgesia with mild sedation and spasmolytic action. They do not cause constipation nor interference with micturition.

All the benefits of prednisone and prednisolone plus positive antacid action to minimize gastric distress



Multiple Compressed Tablets of 'Co-Deltra' and 'Co-Hydeltra' are designed to help the physician cope with the problem of gastric distress which might otherwise become an obstacle to therapy with the newer steroids prednisone and prednisolone. Each Multiple Compressed Tablet is specifically formulated as a "tablet within a tablet" to provide stability and to release in sequence antacid and anti-inflammatory components.

NEW

'Co-Hydeltra'

Prednisolone Buffered

MULTIPLE COMPRESSED TABLETS

and

'Co-Deltra'

Prednisone Buffered

Supplied: Multiple Compressed Tablets of 'Co-Deltra' and 'Co-Hydeltra', each containing 5 mg. prednisone or prednisolone, 300 mg. of dried aluminum hydroxide gel, U.S.P., and 50 mg. of magnesium trisilicate, U.S.P., bottles of 30 tablets.

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ACHROMYCIN*

Tetracycline *Lederle*

in the treatment of

respiratory infections

January and his associates[1] have written on the use of tetracycline (ACHROMYCIN) to treat 118 patients having various infections, most of them respiratory, including acute pharyngitis and tonsillitis, otitis media, sinusitis, acute and chronic bronchitis, asthmatic bronchitis, bronchiectasis, bronchial pneumonia, and lobar pneumonia. Response was judged good or satisfactory in more than 84% of the total cases.

Each month there are more and more reports like this in the literature, documenting the great worth and versatility of ACHROMYCIN. This antibiotic is unsurpassed in range of effectiveness. It provides rapid penetration, prompt control. Side effects, if any, are usually negligible.

No matter what your field or specialty, ACHROMYCIN can be of service to you. For your convenience and the patient's comfort, Lederle offers a *full* line of dosage forms, including

ACHROMYCIN SF

ACHROMYCIN with STRESS FORMULA VITAMINS. Attacks the infection—defends the patient—hastens normal recovery. For severe or prolonged illness. Stress formula as suggested by the National Research Council. Offered in Capsules of 250 mg. and in an Oral Suspension, 125 mg. per 5 cc. teaspoonful.



For more rapid and complete absorption. Offered only by Lederle!

filled sealed capsules

[1]January, H. L. et al: Clinical experience with tetracycline. *Antibiotics Annual* 1954-55, p. 625.

Lederle

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AMERICAN CYANAMID COMPANY

PEARL RIVER, NEW YORK

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PHOTO DATA: 4X5 VIEW CAMERA, F5.6, 1/25 SEC., EXISTING LIGHTING AT DUSK, ROYAL PAN FILM.

Scientific Exhibits

OKLAHOMA STATE MEDICAL ASSISTANTS SOCIETY
Oklahoma City **Booth 1**
"Work of Oklahoma Medical Assistants Society"

Three members of Oklahoma County Medical Assistants wish to display the tape recorder that our State organization has purchased for the Preservation of Oral History of Medicine, in Oklahoma, with which the University of Oklahoma Archivist obtains interviews from pioneer doctors and which are later recorded and transcribed in a permanent file. We also will have some printed literature (explaining the eligibility of a prospective medical assistant) dealing with the advantages to be gained by the doctor's assistant belonging to the Medical Assistants.

DEPARTMENT OF ARCHIVES, UNIVERSITY OF OKLAHOMA
Norman, Okla. **Booth 2**
"Oklahoma Medical History"

Photographs and other historical items relating to the history of the Oklahoma State Medical Association. This year's meeting is the fiftieth meeting of the Association following the amalgamation of the territorial societies.

GILBERT L. HYROOP, M.D.
Oklahoma City **Booth 3**
"Surgery of the Hand and Plastic and Reconstructive Surgery"

Exhibit will consist of pre-operative and post-operative photographs of hand and plastic cases, in black and white, with some kodachrome prints.

WILLIAM L. WALDROP, M.D.
Oklahoma City **Booth 4**
"Hand Surgery"

This exhibit is composed of a pictorial display of enlarged color prints showing various types of hand injuries and their repair. Various operative procedures and examples of hand deformities and their recommended correction will also be presented.

O. ALTON WATSON, M.D.
Oklahoma City **Booth 5**
"Rhinoplasty"

35 mm. colored slides illustrating before and after on different nasal deformities. The kodachrome slides are interspersed with slides of printed material, which explain the procedure used. There will be a total of two or three hundred slides.

GEORGE KIMBALL, M.D.
Oklahoma City **Booth 6**
"Plastic and Reconstructive Surgery"

A photographic display showing the repair of congenital and acquired deformations, traumatic conditions, etc.

JOE M. PARKER, M.D. and H. C. DODSON, JR., M.D.
Oklahoma City **Booth 7**
"Carcinoma of the Breast, Selection of cases for Radical Mastectomy"

Diagrams and color transparencies mounted on board with transmitted light to illustrate clinical and pathologic findings indicative of inoperability.

OKLAHOMA CANCER SOCIETY
Oklahoma City **Booth 8**
"Differential Diagnosis of Breast Tumors"

A photographic presentation concerning examination of the breast, diagnostic characteristics and recommended treatment. The exhibit was produced by the American Cancer Society with the assistance of Dr. Cushman Haagensen, Director of the Cancer Research Institute at Columbia-Presbyterian Medical Center.

W. K. HARTFORD, M.D.
Oklahoma City **Booth 9**
"Cytologic Diagnosis"

Illuminated boxes containing microscopic transparencies with descriptive legend for each group to illustrate the cytologic method, its values and its disadvantages.

ALLEN E. GREER, M.D. and JOHN M. CAREY, M.D.
Oklahoma City **Booth 10**
"Primary Cancer of the Lung"

A study of 150 private cases. Colored gross pictures, microscopic slides, charts and tables will be presented in this display.

DEPARTMENTS OF MEDICINE AND PATHOLOGY, VETERANS ADMINISTRATION HOSPITAL and UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE
Oklahoma City **Booth 11**
"The Technique and Clinical Value of Needle Biopsy of the Liver"

This exhibit will illustrate the technique and clinical value of needle biopsy of the

technique, together with outlines of the indications and contraindictions for use of liver. Pictorial demonstration of the biopsy needle biopsies of the liver, shall be provided. There shall be brief illustrative case histories supplemented by photomicrographs, in color, of liver biopsy specimens obtained in the study of the patients concerned. Included shall be cases of acute and late phases of infectious hepatitis, unsuspected metastatic and primary carcinomas, and examples of fatty liver, nutritional and post-necrotic cirrhosis. The value of the application of histochemical stains, such as the glycogen, alkaline phosphatase, and cholinesterase stains to needle biopsy specimens of the liver shall also be demonstrated.

DEPARTMENT OF UROLOGY UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE and D. W. BRANHAM, M.D.
Oklahoma City **Booth 12**
"Management of Urethral Trauma"

This is a graphic presentation of the various types of urinary calculi and a method of management. This exhibit will utilize a view box.

VETERANS ADMINISTRATION HOSPITAL, Department of Physical Medicine and Rehabilitation, UNIVERSITY HOSPITAL, Department of Physical Medicine and Rehabilitation, REHABILITATION CENTER
Okmulgee, Okla. **Booth 13**
"Rehabilitation of the Handicapped"

This will be a demonstration of the principles of physical therapy and occupational therapy of selected patients, showing steps from hospital bed to independency on the job. This will be a live demonstration showing practical measures which can be prescribed in the doctor's office and in the hospital, with emphasis placed on prosthetic appliances for the paraplegic and amputee,

VOCATIONAL REHABILITATION DIVISION OF THE STATE BOARD FOR VOCATIONAL EDUCATION
Oklahoma City **Booth 14**
"Work of Vocational Rehabilitation"

The purpose of this exhibit is to inform the Medical Profession about the services we have available for handicapped people and how these services may be utilized.

OKLAHOMA STATE OCCUPATIONAL THERAPY ASSOCIATION
Oklahoma City **Booth 15**
"Oklahoma State Occupational Therapy Exhibit"

This will be an educational exhibit showing occupational therapy in hospitals of Oklahoma, which is under the sponsorship of the State of Oklahoma Occupational Therapy Association. Panels showing photographs of occupational therapy treatments for TB and neuropsychiatric conditions, general medical, surgical, and orthopedic patients will be used to demonstrate the functional use of equipment for exercise and retraining in self-care.

J. W. KELSO, M.D. and J. W. FUNNELL, M.D.
Oklahoma City **Booth 16**
"Surgical Management of Carcinoma of the Cervix"

The exhibit will carry out our plan of therapy for the surgical treatment of Carcinoma of the Cervix. It will exhibit our ten years of experience with the treatment of this disease. We will exhibit the necessity of early diagnosis—the value of cytological smears and the comparative results of our treatment to that of world wide reported results of x-ray and radium. The exhibit will also demonstrate the results in cases of carcinoma of the cervical stump as well as Carcinoma of the Cervix complicated by pregnancy.

VETERANS ADMINISTRATION HOSPITAL
Muskogee, Okla **Booth 17**
"Lesions of the Digestive System that Commonly Result in Anemia"

This exhibit is planned for the purpose of showing lesions of the digestive system that commonly result in anemia either through blood loss or impairment of nutrition. A central diagram will be surrounded by roentogenograms and photographs of gross specimens. The exhibit is made up of transparencies mounted on an illuminated view box.

RADIOISOTOPE SERVICE, VETERANS ADMINISTRATION HOSPITAL
Oklahoma City **Booth 18**
"Differential Diagnosis of Anemia with Radioisotope and Treatment of Malignancy with P-32"

Part I: Demonstrates how radioactive iron, cobalt, and chromium can be used to differentiate pernicious anemia, hemolytic anemias, aplastic anemias, etc. *Part II:* Demonstrates the use of P-32 in the treatment of chronic myelogenous leukemia, polycythemia rubra vera, intraperitoneal metastases, prostatic and breast carcinoma.

ISOTOPE LABORATORY UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE and WINFIELD EVANS
Oklahoma City **Booth 19**

"Scintillation Spectrometer"

A Scintillation Spectrometer will be on display in this booth for the inspection of Oklahoma physicians.

RADIOISOTOPE SERVICE, VETERANS ADMINISTRATION HOSPITAL
Oklahoma City **Booth 20**

"Clinical Uses of Radioisotopes"

This exhibit consists of cards which explain the clinical uses of radioisotopes. These cards will be attached to a mannequin on the body area involved with the test. The explanations will be in terms which have meaning to a lay audience.

SURGICAL SERVICE AND RADIOLOGICAL SERVICE, VETERANS ADMINISTRATION HOSPITAL
Oklahoma City **Booth 21**

"Abdominal Aortography"

Radiographic demonstrations, several preoperative and post-operative, of lesions involving the abdominal aorta and its branches.

MEDICAL RESEARCH LABORATORY, VETERANS ADMINISTRATION HOSPITAL and DEPARTMENTS OF BIOCHEMISTRY, PHARMACOLOGY and MEDICINE
Oklahoma City **Booth 22**

"Laboratory Methods for Evaluation of Patients with Arthritis"

This exhibit explains the various laboratory methods used in evaluation of the clinical activity of the rheumatoid state. It explains polysaccharide ratios, protein electrophoresis, sheep cell agglutination, creatine protein and lupus erythematosis preparations.

OKLAHOMA STATE DEPARTMENT OF MENTAL HEALTH
Oklahoma City **Booth 23**

"Research on Chlorapromazine"

This exhibit will feature the results of an 18 month study on the Chlorapromazine drug for mentally ill patients. The study was conducted by Dr. Frank Adelman, Ft. Supply.

J. P. LUTON, M.D.
Oklahoma City **Booth 24**

"Squints"

Kodacolor photographs and kodachrome slides showing results of treatment of various types of squints.

DEPARTMENT OF OPHTHALOMOLOGY, UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE and OKLAHOMA UNIVERSITY HOSPITALS
Oklahoma City **Booth 25**

"Retinal Photographs"

This exhibit will demonstrate actual retinal photographs of cases taken at Crippled Children's Hospital. This retinal photographic service is now available for doctors throughout the state at Crippled Children's Hospital.

OKLAHOMA MEDICAL RESEARCH FOUNDATION
Oklahoma City **Booth 26**

"Work of the Foundation"

This exhibit will portray current research projects now being conducted at the Foundation.

OKLAHOMA STATE HEART ASSOCIATION
Oklahoma City **Booth 27**

"Stop Rheumatic Fever"

The exhibit presents the prevention of Rheumatic Fever through the control of streptococcus infection. It outlines the manifestations and treatment of streptococcus infections and the prevention of streptococcus infections in rheumatic individuals. The *Modified Jones Criteria* will be distributed at the booth, and other professional materials available from the Oklahoma State Heart Association will be on display.

OKLAHOMA POISON INFORMATION CENTER—UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE
Oklahoma City **Booth 28**

"Poison Information Center"

The proposed exhibit will consist of charts and diagrams illustrating the accidental deaths from various causes particularly from poisons in Oklahoma, and the ratio of reduction in deaths in children from disease as compared to deaths from accidents.

DEPARTMENT OF PATHOLOGY—UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE
Oklahoma City **Booth 29**

"Autopsy Studies on Infants and Children at University Hospitals Over the Ten Year Period 1946-1955"

Autopsy findings will be summarized with particular reference to 1) special problems in the newborn and neonatal group, e.g., prematurity, hyaline membrane disease, birth injuries, and congenital anomalies, and 2) special problems of older infants and children, e.g., infectious diseases and neoplasms.

Presented by T. Y. Low, M.D., Jeanne Green, M.D., and Howard C. Hopps, M.D.

OKLAHOMA STATE DEPARTMENT OF HEALTH
Oklahoma City **Booth 30**

"Perinatal Mortality"

Under the sponsorship of a committee from by the University of Oklahoma Medical School and the State Department of Health. This project will be of service to the physicians in the State in that staff from the obstetric and pediatric department of the University of Oklahoma Medical School, with assistance from other departments in the University, are available for consultation and discussion with hospital staffs and clinic groups on problems involved in the care of the mother and infant during the perinatal period.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS, INC.
Oklahoma City **Booth 31**

"Polio Prevention is the Goal"

Facts about Polio Vaccine will be available in this booth. Informative literature will be distributed.

CHRISTIAN MEDICAL SOCIETY
Chicago, Illinois **Booth 32**

"Work of the Society"

The purpose of this booth is to acquaint the Oklahoma physicians with the purposes and aims of the Christian Medical Society. The national secretary of C.M.S., Mr. Ray Knighton, will be available to answer questions concerning the Society.

THE BAPTIST MEMORIAL HOSPITAL
Oklahoma City **Booth 33**

"The Proposed Baptist Memorial Hospital"

Architectural drawings of the proposed new hospital will be available for inspection by the Oklahoma physicians. There will also be drawings which will delineate space allocation, and materials which will show the proposed expansion programs in other Baptist Hospitals throughout the state of Oklahoma.

ST. ANTHONY HOSPITAL AUXILIARY
Oklahoma City **Booth 34**

"Auxiliary Services to Hospital"

Garments made by our sewing committee, pictures of the hospital and posters indicating work being done by other committees of the auxiliary will be displayed in our booth.

MERCY HOSPITAL AUXILIARY
Oklahoma City **Booth 35**

"Auxiliary Services to Hospital"

On display in this booth will be a large poster depicting Auxiliary Services to the hospital, and a display of hospital supplies which are made by the auxiliary.

MERCY HOSPITAL
Oklahoma City **Booth 35**

"Mercy Hospital's Community Service"

This exhibit will be a pictorial presentation of the magnitude of services provided by our hospital, such as the number of babies born, indigent patient service, etc.

S. FULTON TOMPKINS, M.D.
Oklahoma City **Booth 36**

"Management of Severe Fractures of the Pelvis"

This exhibit will consist of photographed x-rays with summarized histories of a series of cases of severe pelvic fractures, demonstrating the methods and results of treatment. The specific objectives of treatment will be emphasized.

UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE AND HOSPITALS
Oklahoma City **Booth 37**

"Ten Years of Progress"

The exhibit will consist of attractive displays of the advances of the school and hospitals in the last ten years in three areas: (1) medical service, (2) medical education, and (3) medical research and development.

SEARS-ROEBUCK FOUNDATION
Chicago, Illinois **Booth 38**

"Plan of Assistance to Physicians Establishing Medical Practice Facilities"

This exhibit will be a graphic presentation of the policies of the Foundation, which provides for long-term, unsecured loans for physicians wishing to establish practices in areas deficient in medical services.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, PUBLIC HEALTH SERVICE, REGION VII
Dallas, Texas **Booth 39**

"Opportunities in the U.S. Public Health Service"

The exhibit briefly describes the role of the Service in the areas of Clinical Medicine, Research, and Preventive Health Services. It suggests that professional personnel may join the Service's Commissioned Corps, either for careers in the Public Health Service or for professional service in national emergencies.

Oklahoma State Medical Association

Oklahoma City, Oklahoma

INCOME AND EXPENSE STATEMENT

January 1, 1955—December 31, 1955

		EXHIBIT "B"
INCOME		
Dues	$62,022.25	
United States Bond Interest	62.50	
Annual Meeting—Schedule	9,536.00	
Journal—Schedule	24,417.55	
Miscellaneous—Schedule	2,191.46	$98,229.76
EXPENSE		
Office Expense—Schedule	$43,115.69	
Annual Meeting—Schedule	12,139.82	
Journal—Schedule	25,501.67	
Public Policy Committee—Schedule	1,549.94	
Public Health Committee—Schedule	414.00	
Legal Expense	1,400.00	
Travel—Out of State	4,082.41	
History of Medicine	200.00	$88,403.53

BALANCE SHEET

December 31, 1955

ASSETS

			EXHIBIT "A"
CURRENT ASSETS			
Cash in Bank			$44,026.50
FIXED ASSETS			
Real Estate			6,338.50
Furniture and Fixtures	$11,847.13		
Less: Reserve for Depreciation	4,759.44		7,087.69
INVESTMENTS			
United States Treasury Bonds			12,398.88
DEFERRED ASSETS			
Employees Retirement Fund—Contra			9,078.68
TOTAL ASSETS			78,930.25

LIABILITIES AND NET WORTH

ACCRUED LIABILITIES		
Withholding Tax	$ 291.40	
Social Security	157.20	
Retirement Fund—Employees Contribution	2,474.42	2,923.02
Reserve for Employees Retirement Fund—Contra		9,078.68
NET WORTH		66.928.55
TOTAL LIABILITIES AND NET WORTH		$78,930.28

KNOX Protein Previews



New Booklet Presents Latest Facts on Feeding the Sick



Adequate nutrition during illness and convalescence is essential for recovery whether the patient is managed in the hospital or at home. In the latter case, physicians often must devote much time to instructing those responsible for caring for the sick in good nutritional practices.

"Meal Planning for the Sick and Convalescent" has been designed to relieve you of the need for repeating over and over again essential dietary facts. This new Knox booklet presents in layman's language the latest nutritional applications of proteins, vitamins and minerals, gives practical hints on serving food to adults and children, suggests ways to stimulate appetite and describes diets from clear liquid to full convalescent. Best of all it offers the homemaker for the first time detailed daily suggested menus for each type of diet, plus 14 pages of tested nourishing recipes.

If you would like copies of this new timesaving Knox booklet for your practice, use the coupon below.

Chas. B. Knox Gelatine Company, Inc.
Professional Service Department SJ-16
Johnstown, N. Y.

Please send me.....copies of the new Knox "Sick and Convalescent" booklet.

YOUR NAME AND ADDRESS

OKLAHOMA STATE MEDICAL ASSISTANTS SOCIETY

TENTATIVE SCHEDULE OF EVENTS

FRIDAY, MAY 4, 1956

Reception for out of town guests——Entertainment by Mr. George Tonak
(Homemakers' Products Corporation, New York)

SATURDAY, MAY 5—Morning Session

Registration
Call to Order——Jeannie O'Dell, Nowata
(President, O.S.M.A.S.)
Invocation
Official Welcome——Mr. Dick Graham, Executive Secretary
(Oklahoma State Medical Association)
Response
Official Business: Minutes 1955 Convention. Previous minutes Board Meetings
"The Business of New Drug Discovery"——Mr. Don Meredith
(Trade & Guest Relations, The Upjohn Company, Kalamazoo, Michigan)
"Tre Greatest Good" (Film)——The Upjohn Company
(The miracle of Modern medicine, showing the results of combined offorts of medical and pharmaceutical research in development and use of new products)
Luncheon

SATURDAY, MAY, 5—Afternoon Session

Roll Call by Counties, Officers Reports,
Presentation of Nomination Committee Slate.
Report: "PROPOSED AMERICAN ASSOCIATION OF MEDICAL ASSISTANTS"
Mrs. Carol Towner, American Medical Association, Chicago
Announcement of election results

SATURDAY, MAY 5—Evening

Social Hour——Medical Service Society, Oklahoma City
Banquet Dinner
Welcome and Introduction of Medical Advisors and Honored Guests——Wm. H. Reiff, M.D
(Oklahoma County Medical Advisor)
Progress of Medical Research Pageant
"Meet TV's Top M.D."——Mr. Richard Boone, "The Medic"
(TV's "Dr. Konrad Styner")
"A Riot in Dixieland"——The Cell Block Seven, Dallas, Texas
(This Is Music??)

SUNDAY, MAY 6—Morning Session

Invocation
Medical Aspects of Driver Arrests——Hon. P. James Demopolos
(Oklahoma City Municipal Traffic Court Judge)
County Reports
Presentation of Contribution to History of Medicine,
Mr. James Babcock and Dr. G. Litton, accepting for Archives of University of Oklahoma
Installation of New Officers
"I Believe"——Music and Lyrics
(by Mr. Bob Wallace, Blue Cross-Blue Shield)
Luncheon——Blue Cross-Blue Shield
"Need and Birth of Extended Benefits Program"——N. D. Helland, Director
"How it Works"——Windham Hill, Case Dept.

SUNDAY, MAY 6—Afternoon Session

Address——Katherine Meeks, Stillwater
(1956-1957 President, O.S.M.A.S.)
Presentation of Gifts
Award of Achievement Trophy to Winning County

pronounced

MUSCLE-RELAXING ACTION

Equanil*

MEPROBAMATE

(2-methyl-2-*n*-propyl-1,3-propanediol dicarbamate)

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For significant relief in myositis, osteoarthritis, backstrain, and related conditions marked by:

- *Muscle spasm*
- *Stiffness and tenderness*
- *Restriction of motion*
- *Pain*

As a superior muscle-relaxant, EQUANIL offers predictable action and full effectiveness on oral administration. It does not disturb autonomic function and is relatively free from gastric and other significant side-effects. Its anti-anxiety property provides important correlative value.

Usual dosage: 1 tablet t.i.d. The dose may be adjusted either up or down, according to the clinical response of the patient.

Supplied: Tablets, 400 mg., bottles of 50.

Wyeth®

Philadelphia 1, Pa.

anti-anxiety factor
with muscle-relaxing action
...relieves tension

Oklahoma State Medical Association
Delegates and Alternates

Society	Delegates	Alternates
Alfalfa-Woods	Not Received	
Atoka-Bryan-Coal	R. L. Cochran, M.D., Caddo	Leroy L. Engles, M.D., Durant
Beckham	Not Received	
Blaine	Not Received	
Caddo	E. T. Cook, Jr., M.D., Anadarko	C. B. Sullivan, M.D., Carnegie
Canadian	Not Received	
Carter-Love-Marshall	Not Received	
Cherokee-Adair	Not Received	
Cleveland-McClain	Robert O. Ryan, M.D., Norman	W. C. McCurdy, Jr., M.D., Purcell
	Orville M. Woodson, M.D., Norman	W. R. Patten, M.D., Norman
	R. C. Mayfield, M.D., Norman	F. C. Buffington, M.D., Norman
Comanche-Cotton	Not Received	
Creek	Not Received	
Custer	Ellis Lamb, M.D., Clinton	McClain Rogers, M.D., Clinton
East Central	Not Received	
(Muskogee, Sequoyah, Wagoner, McIntosh)		
Garfield-Kingfisher	J. Wendall Mercer, M.D., Enid	Mark D. Holcomb, M.D., Enid
	Evans E. Talley, M.D., Enid	Edward W. Bank, M.D., Enid
	John A. McIntyre, M.D., Enid	Herbert B. Shields, M.D., Jr., Enid
	Ray V. McIntyre, M.D., Kingfisher	Frank C. Lattimore, M.D., Kingfisher
Garvin	Ray E. Spence, M.D., Pauls Valley	J. A. Graham, M.D., Pauls Valley
Grady	Not Received	
Grant	Not Received	
Greer	Fred W. Sellers, M.D., Mangum	David Fried, M.D., Mangum
Hughes-Seminole	Not Received	
Jackson	Not Received	
Jefferson	Not Received	
Kay-Noble	E. C. Yeary, M.D., Ponca City	C. E. Northcutt, M.D., Ponca City
	J. T. Terry, M.D., Ponca City	C. W. Arrendell, M.D., Ponca City
Kiowa-Washita	Not Received	
LeFlore-Haskell	W. W. Cotton, M.D., Poteau	Earl M. Woodson, M.D., Poteau
Lincoln	Ned Burleson, M.D., Prague	John Rollins, M.D., Prague
Logan	Not Received	
Northwestern	(Beaver, Dewey, Ellis, Harper, Woodward)	
	E. A. McGrew, M.D., Beaver	R. G. Obermiller, M.D., Woodward
	M. H. Newman, M.D., Shattuck	Richard Burgtorf, M.D., Shattuck
Okfuskee	Chas. L. Reynolds, M.D., Weleetka	No Alternate Reported
Oklahoma	Allen Greer, M.D., Oklahoma City	Ira O. Pollock, M.D., Oklahoma City
	A. C. Lisle, Jr., M.D., Oklahoma City	John D. Ingle, M.D., Oklahoma City
	Arthur Elliott, M.D., Oklahoma City	E. E. Cooke, M.D., Oklahoma City
	P. D. Casper, M.D., Oklahoma City	James Amspacher, M.D., Oklahoma City
	E. E. Shircliff, M.D., Oklahoma City	George H. Garrison, M.D., Oklahoma City
	Robert Sturm, M.D., Oklahoma City	Richard E. Carpenter, M.D., Oklahoma City
	V. M. Rutherford, M.D., Midwest City	Harry E. Singleton, M.D., Oklahoma City
	Jack Glasgow, M.D., Oklahoma City	Robert A. Rix, M.D., Oklahoma City
	Byron Williams, M.D., Oklahoma City	Edmond H. Kalmon, M.D., Oklahoma City
	J. R. Colvert, M.D., Oklahoma City	J. W. Kelso, M.D., Oklahoma City
	Edward M. Farris, M.D., Oklahoma City	James R. McLauchlin, M.D., Oklahoma City
	M. M. Appleton, M.D., Oklahoma City	J. N. Owens, M.D., Oklahoma City
	S. N. Stone, Jr., M.D., Oklahoma City	J. J. Gable, M.D., Oklahoma City
	H. T. Avey, M.D., Oklahoma City	William L. Waldrop, M.D., Oklahoma City
	Wm. J. Dowling, M.D., Oklahoma City	Robert B. Howard, M.D., Oklahoma City
	Ella H. Murray, M.D., Oklahoma City	John M. Carey, M.D., Oklahoma City
	Nolen Armstrong, M.D., Oklahoma City	J. Hartwell Dunn, M.D., Oklahoma City
	S. R. Shaver, M.D., Oklahoma City	Walter Hartford, M.D., Oklahoma City

	Arnold G. Nelson, M.D., Oklahoma City	Scott Hendren, M.D., Oklahoma City
	James S. Boyle, M.D., Oklahoma City	J. P. Wolff, M.D., Oklahoma City
Okmulgee	A. L. Buell, M.D., Okmulgee	C. E. Smth, M.D., Henryetta
Osage	Not Received	
Ottawa-Craig	Not Received	
Payne-Pawnee	Not Received	
Pittsurgh	E. M. Greenberger, M.D., McAlester	George M. Brown, Jr., M.D., McAlester
	T. H. McCarley, M.D., McAlester	T. Shuller, M.D., McAlester
Pontotoc	E. M. Gullatt, M.D., Ada	C. P. Taylor, M.D., Ada
	Ollie McBride, M.D., Ada	D. C. Ramsay, M.D., Ada
Pottawatomie	E. E. Rice, M.D., Shawnee	Frances P. Newlin, M.D., Shawnee
	Clarence C. Young, M.D., Shawnee	John M. Carson, M.D., Shawnee
Rogers-Mayes	Not Received	
Stephens	J. P. Keller, M.D., Duncan	Bill Cheatwood, M.D., Duncan
Texas-Cimarron	Not Received	
Tillman	F. P. Fry, M.D., Frederick	Joe Horton, M.D., Frederick
Tri-County	Not Received	
(Choctaw, McCurtain, Pushmataha)		
Tulsa	Walter E. Brown, M.D., Tulsa	Hays R. Yandell, M.D., Tulsa
	J. D. Shipp, M.D., Tulsa	Robert Hall Johnson, M.D., Tulsa
	Earl M. Lusk, M.D., Tulsa	Lucien M. Pascucci, M.D., Tulsa
	Horace H. Porter, M.D., Tulsa	G. R. Russell, M.D., Tulsa
	Lowell L. Stokes, M.D., Tulsa	James B. Thompson, M.D., Tulsa
	John E. McDonald, M.D., Tulsa	F. L. Flack, M.D., Tulsa
	I. H. Nelson, M.D., Tulsa	Milford S. Ungerman, M.D., Tulsa
	Marshall O. Hart, M.D., Tulsa	Jack L. Richardson, M.D., Tulsa
	L. A. Munding, M.D., Tulsa	Edward L. Moore, M.D., Tulsa
	Hugh Perry, M.D., Tulsa	Vincel Sundgren, M.D., Tulsa
	Berget H. Blocksom, M.D., Tulsa	Logan A. Spann, M.D., Tulsa
	Rayburne W. Goen, M.D., Tulsa	N. C. Gaddis, M.D., Tulsa
	James W. Kelley, M.D., Tulsa	R. M. Wadsworth, M.D., Tulsa
Washington-Nowata	L. B. Word, M.D., Bartlesville	J. H. Lindsay, M.D., Dewey
	F. C. Lawrence, M.D., Bartlesville	R. G. Allen, M.D., Bartlesville
	O. L. Grigsby, M.D., Nowata	J. H. Elliott, M.D., Nowata

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Fully approved by the State Department of Health for
Seventy-four beds, for Medical-Chronic-Convalescent Patients

Graduate Nursing Supervision
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Complete Patient Records
Competent Sterilization
Laboratory Facilities
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Central Heating
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Each room has large outside windows for light and ventilation
Competent personnel—Experienced Administration—Rates are reasonable
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W. H. HELDENBRAND, Pres. **J. R. PROPPS, Secy.-Mgr.**

What makes Viceroy different from other filter cigarettes?



The VICEROY filter tip contains 20,000 tiny filters made exclusively from pure cellulose . . . soft, snow-white, natural. This is twice as many filters as the other two largest-selling filter brands.

That is why VICEROY gives you such a fresh, clean taste—that real tobacco taste you miss in other filter brands. No wonder so many doctors now smoke and recommend King-Size VICEROYS.

If it's Viceroy you can tell the difference blindfolded!



King-Size Filter Tip **VICEROY**

History of the Oklahoma State Medical Association

The land that is now Oklahoma until 1803 belonged to France. In the early 1830's it was given to the Choctaws, Chickasaws, Cherokees, Creeks and Seminoles in exchange for their lands in the southern states. These tribes sided with the Confederacy during the Civil War and after the war much of the land in the western part of the state was taken from them and became Oklahoma Territory. The eastern part became Indian Territory. As these territories were opened to settlement a medical society developed in each.

James M. Babcock, M.A. accepted the challenge to put the record of the Association from this time forward in order. Mr. Babcock is assistant archivist, Division of Manuscripts, of which Gaston Litton, Ph.D. is archivist, University of Oklahoma. The Department of Archives has been especially interested in gathering material on all aspects of the history of medicine in Oklahoma. In this it has been aided by funds from the Association, and from the Medical Assistants Society.

Up to the time of his death Dr. L. J. Moorman, then Editor of the *Journal,* had been interested in this same subject and had inspired the profession and the University to begin collecting and assembling the archives of Oklahoma medicine.

It is contemplated that at such time as sufficient original research materials are at hand that a complete history of medicine for the state of Oklahoma can be written and published.

—The Editors.

Author's Preface

Fifty years ago this month, the medical associations of Indian and Oklahoma Territories met in Oklahoma City in joint session for the purpose of amalgamating under the name of the Oklahoma State Medical Association. In commemoration of that historic meeting, your *Journal* for this month is devoted to certain phases of the history of your Association. The articles included in this issue are confined to the history of the Association and the development of its organization. No attempt has been made to treat the History of Medicine in Oklahoma generally. This must necessarily be reserved for a more comprehensive study, involving research in the archival materials already collected and those yet to be collected, at the University of Oklahoma Archives under a project of the Association.

Seventy-five years ago, in April, 1881, the Indian Territory Medical Association was organized. In this, the diamond jubilee year of organized medicine in Oklahoma, it might be well to consider what a medical association meant to those hardy pioneer physicians. The physicians of our day in all likelihood will not have experienced the same sharp transition from a highly cultured and scientific atmosphere to what might be called a medical vacuum. Imagine a doctor, trained for the practice of medicine in the great schools in the eastern United States. The greatest medical minds have been at his disposal. His training has taken place in the most modern, up-to-date clinical facilities. He is equipped, in other words, to practice the art of medicine under ideal conditions. Sources of drugs and medicines are close by. Hospitals and specialists for consultation are in the neighborhood.

When he came to the Indian Territory 75 years ago, hospitals were unheard of. And even if one did exist, many of his patients would not enter it. He daily must rely upon his own initiative and resourcefulness in caring for his patients. The physicians of the Territory were aware of their need for sharing experiences of practicing the healing arts under frontier conditions. Out of the realization of this need, grew the Indian Territory Medical Association with its semi-annual meetings and comprehensive scientific programs. Organized medicine, from the first in Oklahoma, has also been instrumental in the improvement of public health and medical legislation.

Legion are the physicians whose names might well be included in any attempt to present the history of the Association. You may find, however, that there are what seem to be obvious omissions. Such names as Livermore, Riley, Ewing, Newman, Howard, Wormington, Osborn, Hardy, Higgins, Penquite, Hume. Kerley, Speed, Shuler, Fulton, Tolleson, Fite, Risser, Moorman, Bobo, Griffin, Hinson, Clark, Reed, Murdoch, Weber, Rucks, Angus, Aderhold, Walker, Petty, and many others perhaps will be found only in the various lists. Any one of these, and many others, could well assume a larger proportion of space than in the present form. Again, however, their stories must remain to be included in the long-projected History of Medicine in Oklahoma.

Unless otherwise indicated, the persons appearing in the narrative and lists are Doctors of Medicine.

Indian Territory Medical Association

Organized medicine in Oklahoma had its beginning all of 75 years ago. In 1881, a group of physicians in the Indian Territory met for the purpose of organizing an association to promote the advancement of medicine and to improve relations among themselves. As the physicians from the Indian Territory side of the state gather in Oklahoma City for the Annual Meeting of the Oklahoma State Medical Association, they will be celebrating the Diamond Anniversary of the founding of the Indian Territory Medical Association.

Chronologically, the history of the Indian Territory Medical Association, begins in 1881 and ends in 1906. For a time, however, from soon after its original organization until 1889 the Association apparently was inactive. This perhaps can be attributed to the removal from the state of Dr. B. F. Fortner, who sojourned for a time in Arkansas. He had been the stalwart organizer and activator of much of the Association's activities and during his absence from the Territory organized medicine waned. Upon his again taking up residence in the Cherokee Nation, the Association was revived and grew to sizable proportions and influence. In 1906, the year of the amalgamation of the Oklahoma and Indian Territory medical societies, there were listed in the membership more than 500 physicians in the Indian Territory.

The first meeting, April 18, 1881, in Muskogee, materialized pursuant to a call issued earlier in the Spring. The guiding hand of the convention was B. F. Fortner, M.D., Claremore. For the chairmanship of the convention, Doctor Fortner nominated G. W. Commings, Muskogee, who was elected. Doctor Cutler was elected Vice-President. Doctor Fortner and Dr. C. Harris were elected secretaries of the meeting.

Following the election of the convention officers, the Chairman outlined the reasons for calling the meeting. To prepare for the organization of a medical society, Doctor Commings appointed Doctor Fortner and Dr. Felix McNair a Committee on Constitution and By-laws. The first day's session adjourned after a brief discussion of the proposed work of this committee.

During the second day's session, the assembled physicans accepted the Constitution proposed by the Committee on Constitution and By-laws. Under the new constitution, the following officers were elected:

President—B. F. Fortner, Vinita
Vice-President, 1st—G. W. Commings, Muskogee
2nd—Felix McNair, Locust Grove
Secretary—M. F. Williams, Muskogee
Treasurer—R. B. Howard, Fort Gibson
Librarian—E. P. Harris

The Board of Censors was composed of C. Harris, E. P. Harris, K. R. Cutler, W. T. Adair, and W. H. Bailey.

The membership of the Association was composed of two categories: regular and honorary. Regular members were graduates of reputable medical schools recognized by the American Medical Association. Medical officers and honorable undergraduates of accredited schools were accorded Honorary Memberships and were ineligible for office. A physician had to be recommended for membership by two members and had to receive the approval of the Board of Censors. He must also have been in good medical standing.

A member could be expelled for malpractice, non-payment of dues, and for violation of the A.M.A. Code of Ethics. Following is the Code as adopted:

> As good citizens it is the duty of physicians to be ever vigilant for the welfare of the community, and to bear their part in sustaining its institutions and burdens; they should also be ever ready to give counsel to the public in relation to matters especially pertaining to their profession, as on subjects of medical police, public hygiene and legal medicine. It is their province to enlighten the public in regard to quarantine regulations, the location, arrangement and dietaries of hospitals and other similar institutions; in relation to medical police of towns, as drainage, ventilation, etc., and in regard to measures for prevention of epidemic and contagious diseases, and when pestilence prevails, it is their duty to face the danger and to continue their labors for the alleviation of the

suffering, even at the jeopardy of their own lives.

The annual dues were set at $1.50 and remained at this level until just prior to the amalgamation with the Oklahoma State Medical Association.

At first the Association met upon call of the President, but later provision was made for quarterly meetings. Still later, the Constitution was amended to prescribe semi-annual meetings in June and December. The specific dates in these months varied over the years.

The importance of the preparation and reading of scientific papers and of the reporting of unusual cases was recognized from the beginning as an integral part of the activities of organized medicine. These pioneer physicians were, in many instances poorly prepared for the practice of medicine. They were far from the recognized medical centers where post-graduate instruction was available. They were forced time and again to invent and improve in treatment and surgery. They were well aware, therefore, that the accurate and scientific reporting of their unique cases served a useful purpose in their mutual education. Indeed, then as now, the prime motive in the annual meetings of medical associations was to provide an opportunity for the busy practitioner to further his education in a rapidly changing profession.

Early in the history of the I.T.M.A., guest speakers were invited to address the meetings. One such outside speaker came from as far away as New York.

Following are the dates of the semi-annual and annual meetings of the Indian Territory Medical Association and the cities in which they were held:

April 18, 1881, Muskogee
September 14, 1881, Muskogee
June 28, 1889, Muskogee
October 10, 1889, Vinita
January 10, 1890, Atoka
June 4, 1890, South McAlester
December 11, 1890, Ft. Gibson
June 9, 1891, South McAlester
December 8, 1891, Muskogee
June 14, 1892, Vinita
December 15, 1892, Wagoner
June 22, 1893, Atoka
December 14, 1893, Muskogee
June 14, 1894, Claremore
December 11, 1894, Wagoner
June 4, 1895, South McAlester
December 3, 1895, Eufaula
June 3, 1896, Wagoner
December 1, 1896, Vinita
June 29, 1897, South McAlester
December 7, 1897, Muskogee
June 1, 1898, Wagoner
December 6, 1898, Wagoner
June 20, 1899, South McAlester
December 5, 1899, Wagoner
June 19, 1900, Wagoner
December 4, 1900, Muskogee
June 4, 1901, Vinita
December 3, 1901, Muskogee
June 3, 1902, South McAlester
June 7, 1904, Holdenville
June 20-22, 1905, Tulsa

The physicians of the Indian Territory as an association were very much interested in elevating the medical profession. Attempts were made to enforce the rigid code of ethics which had been adopted. Also, the Association repeatedly urged the federal government and the governments of the Indian Nations to regulate the practice of medicine in the Territory.

The lack of uniformity in the regulations governing medical practice in the Indian Nations caused much concern among the members of the Association. They repeatedly, through various committees, memorialized the governments of the Nations to improve conditions. Finally in 1904, as a result of their efforts, the National Congress passed a Medical Practice Act for the Indian Territory. For purposes of administration the Territory was divided into four districts: Northern, Southern, Western, and Central.

The American Medical Association, in Annual Meeting, in 1901, effected a reorganization which received the expressed approval of the Indian Territory Medical Association. Indeed, the following year the I.T.M.A. reorganized in accordance with a plan suggested by the A.M.A. under its new organizational scheme.

This reorganization of the A.M.A. established the House of Delegates. This group of representatives of the component societies across the country replaced the general session as the governing body of the Association. For the interim management of affairs, a Council was established.

From this time until the present the development of organized medicine in Oklahoma has had a close association with the development of the American Medical Association.

Among the various activities of the Association at home was the attempt to establish minimum rates for calls and to enforce them. The rate for day calls was $1.00 per mile and for night calls $2.00 per mile.

Following is as complete a list as possible of the Officers of the Indian Territory Medical Association from 1881 until 1906. The information was gleaned from the original minutes of the Association, from the published Proceedings of the 1906 joint meeting and from an article in the *Chronicles of Oklahoma* by the late Fred S. Clinton, Tulsa.

1881-82

President—B. F. Fortner, Claremore
First Vice-President—G. W. Commings, Muskogee
Second Vice-President—Felix McNair, Locust Grove
Secretary—M. F. Williams, Muskogee
Treasurer—Robert B. Howard, Ft. Gibson

1889-90

President—B. F. Fortner, Vinita
First Vice-President—J. R. Brewer, Muskogee
Second Vice-President—R. A. Burr, Chouteau
Secretary—J. O. Callahan, Muskogee
Treasurer—Oliver Bagby, Vinita

1890-91

President—B. F. Fortner, Vinita
First Vice-President—J. S. Langford, Atoka
Second Vice-President—G. A. McBride, Fort Gibson
Secretary—W. R. Thompson, Oklahoma City
Treasurer—Oliver Bagby, Vinita

1891-92

President—W. R. Thompson, Oklahoma City
First Vice-President—E. N. Allen, McAlester
Second Vice-President—Francis B. Fite, Muskogee
Secretary—Oliver Bagby, Vinita
Treasurer—H. B. Smith, McAlester

1892-93

President—H. B. Smith, McAlester
First Vice-President—M. F. Williams, Muskogee
Second Vice-President—Joseph S. Fulton, Atoka
Secretary—Oliver Bagby, Vinita
Treasurer——A. M. Clinkscales, Vinita

1893-94

President—Francis B. Fite, Muskogee
First Vice-President—R. I. Bond, McAlester
Second Vice-President—J. P. Gunby, Sherman, Tex.
Secretary—Oliver Bagby, Vinita
Treasurer—A. M. Clinkscales, Vinita

1894-95

President—Joseph S. Fulton, Atoka
First Vice-President—G. M. McBride, Fort Gibson
Second Vice-President—G. R. Rucker, Eufaula
Secretary—J. T. Rucker, Claremore
Treasurer—M. P. Haynes, Vinita

1895-96

President—Oliver Bagby, Vinita
First Vice-President—G. W. McBride, Fort Gibson
Second Vice-President—G. R. Rucker, Eufaula
Secretary—J. T. Rucker, Claremore

1896-97

President—A. M. Clinkscales, Vinita
First Vice-President—J. P. Brazeel, Wagoner
Second Vice-President—J. L. Blakemore, Muskogee
Secretary—J. T. Rucker, Claremore

1897-98

President—E. N. Allen, McAlester
First Vice-President—George W. West, Eufaula
Second Vice-President—J. B. Rolater, Oklahoma City
Secretary—LeRoy D. Long, Caddo

1898-99

President—G. R. Rucker, Eufaula
First Vice-President—G. A. McBride, Fort Gibson
Second Vice-President—J. T. Rucker, Claremore
Secretary—LeRoy D. Long, Caddo

1899-1900

President—G. A. McBride, Fort Gibson
First Vice-President—Fred S. Clinton, Tulsa
Second Vice-President—W. O. Shannon, Durant
Secretary—LeRoy D. Long, Caddo

1900-01

President—LeRoy D. Long, Caddo
First Vice-President—David Gardner, Lehigh
Second Vice-President—J. N. Fain, Wagoner
Secretary—Fred S. Clinton, Tulsa

1901-02

President—George W. West, Eufaula
First Vice-President—Oliver Bagby, Vinita
Second Vice-President—W. P. Harley, Durant
Secretary—Fred S. Clinton, Tulsa

1902-03

President—Fred S. Clinton, Tulsa
First Vice-President—C. D. Frick, McAlester
Second Vice-President—W. O. Shannon, Durant
Secretary—R. J. Crabill, McAlester

1903-04

President—William A. Tolleson, Eufaula
First Vice-President—David Gardner, Lehigh
Second Vice-President—J. W. Gilbert
Secretary-Treasurer—R. J. Crabill, McAlester

1904-05

President—E. N. Wright, Olney
First Vice-President—H. P. Wilson, Wynnewood
Second Vice-President—F. L. Watson, Alderson
Secretary-Treasurer—R. J. Crabill, McAlester

1905-06

President—Virgil Berry, Okmulgee
First Vice-President—R. H. Harper, Afton
Secretary-Treasurer—Floyd E. Warterfield, Holdenville

The available photographs of the I.T.M.A. Presidents follow.



B. F. FORTNER
Vinita
1881-82, 1889-91



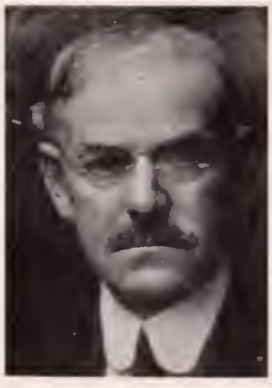
W. R. THOMPSON
Oklahoma City
1891-92



FRANCIS B. FITE
Muskogee
1893-94



JOSEPH S. FULTON
Atoka
1894-95



OLIVER BAGBY
Vinita
1895-96



A. M. CLINKSCALES
Vinita
1896-97



E. N. ALLEN
McAlester
1897-98



LeROY LONG
Caddo
1900-01



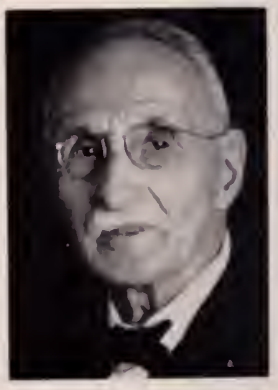
FRED S. CLINTON
Tulsa
1902-03



WILLIAM A. TOLLESON
Eufaula
1903-04



E. N. WRIGHT
Olney
1904-05



V. BERRY
Okmulgee
1905-06

Organized Medicine in Oklahoma Territory

As early as 1890 or 1891 an effort was made to organize a medical association in Oklahoma Territory. Meetings were held in Guthrie and Edmond for that purpose, but it was not until 1893 that the organization was effected.

In January, 1893, *The Oklahoma Medical Journal* was founded by three physicians, Eugene O. Barker, H. P. Halsted and Joseph Pinquard. This private venture immediately began to agitate for the organization of the medical profession in Oklahoma Territory. An editorial calling attention to the need for a territorial medical association was published in the March, 1893, issue:

> "Is it not about time for the Doctors of this Territory to organize a Territorial Medical Society? Every State and Territory except Oklahoma has a successful medical society, and Oklahoma with 300, or more physicians without a Territorial Society is behind the times. We as practitioners, if we hope to keep to the front and alive to the advance of medical science, must have a place where we can meet and exchange ideas and form more friendly and closer relations."

The editors went on to ask the physicians of the territory to answer three questions about whether or not they were willing to assist in organizing the profession, where should the organization meeting take place, and what was the most suitable date.

Sufficient response was received from the profession for the *Journal* to issue a call for a meeting of the physicians of the territory for the purpose of organizing. The most suitable date was found to be May 9, 1893 and the most suitable meeting place, Oklahoma City. Accordingly, 28 physicians met in the Grand Avenue Hotel and perfected the Oklahoma Territorial Medical Association. Following is a list of the charter members:

Applewhite, B. L., Tecumseh
Arnold, C. D., El Reno
Barker, Eugene O., Guthrie
Barnes, S. M., Stillwater
Black, H. H., Oklahoma City
Bradford, Charles B., Oklahoma City
Carson, J. M., El Reno
Clutter, W. H., Oklahoma City
Cravens, T. A., Oklahoma City
Davis, A. A., El Reno
Dewey, F. S., Oklahoma City
Dougan, W. McKay, Perry
Fenlon, J. E., Norman
Halstead, H. P., Guthrie
Hatchett, John A., El Reno
Jackson, A. H., El Reno
McElvain, J. R., Oklahoma City
Mayginnes, N. W., Stillwater
Overstreet, J. A., Kingfisher
Rolater, J. B., Oklahoma City
Ryan, J. A., Oklahoma City
Snow, W. H., Norman
Still, J. M., Noble
Thompson, W. R., Oklahoma City
Trader, E. J., Council Grove
Walker, Delos, Oklahoma City
Walker, Harry, Oklahoma City
Witten, E. W., Oklahoma City

Elected President for the year 1893-94 was Delos Walker, Oklahoma City. Eugene O. Barker, Guthrie, was elected Vice-President and C. D. Arnold, El Reno, was elected Secretary.

The Oklahoma Territorial Medical Association, became known as the Oklahoma Medical Society by amendment to the Constitution in 1902. When the Society was reorganized in 1904 the name adopted was the Oklahoma State Medical Association, which was the name assumed by the amalgamated association in 1906.

The new constitution adopted in 1902, defined the purposes of the Society. Designed to federate into one compact organization the reputable medical profession of Oklahoma in order to foster the growth and diffusion of medical knowledge, the Society was to encourage friendly intercourse among physicians, to safeguard their material interests, and to elevate the standards of medical education. A paramount purpose of the organization was to work for the enactment and enforcement of medical laws. The enlightenment of public opinion on questions of state medicine was also of concern to organized medicine.

The Code of Ethics of the American Medical Association was approved and adopted in the new Constitution.

The Society was to be composed of permanent and honorary members. Physicians eligible for permanent membership had to be graduates of acceptable medical schools and to have been in practice in Oklahoma Territory for at least six months. A member was expected to pay his dues promptly and could not attend the Society's meetings unless his dues were paid. A one year lapse in dues brought about expulsion. Pre-eminent physicians of other states might be named honorary members. Honorary members were exempt from payment of dues but could neither vote nor hold office. Any member could be expelled for mis-conduct by a two-thirds vote of the membership. Permanent members paid an initiation fee of $2.00 and regular annual dues of $1.00.

Officers of the Society were President, Vice-President, and a Secretary-Treasurer. The President, who was not eligible for re-election, was elected for one year. He was also enjoined from delivering an annual address longer than twenty minutes duration. The term of the Vice-President was also one year. The Secretary-Treasurer was elected for a two year term and was charged with the responsibility of arranging the program of the Annual Meeting. The Secretary-Treasurer was authorized to receive a stipend of $20 per year.

Provision was also made for a Judicial Council of three members, to be elected for terms of three years. The Council was created principally for the purpose of passing upon the applications for membership and making recommendations to the Membership. Regular elections to the Council as well as to all other offices occurred during the Annual Meeting.

The President was directed to appoint members to the two standing committees: Arrangements and Medical Legislation. A third standing Committee on Nominations was composed of one member from each county, selected by a majority vote of the County Society.

The Arrangements Committee, composed of three members in the city hosting the society meetings was responsible for the local arrangements. The Secretary was responsible for the program and no paper could be more than twenty minutes long. Roberts Rules of Order were followed and a strict order of business was prescribed.

The Association decided to hold two regular meetings a year. Designated the Annual Meeting, the Spring meeting was held in May or June. The Fall meeting was held in November. In the November, 1904 meeting the Association voted to discontinue the autumn meeting and to have only the Annual Meeting in May. From 1893 until the amalgamation with the Indian Territory Medical Association in 1906, the O.S.M.A. met at the following places and times:

Oklahoma City, May 9, 1893
El Reno, November, 1893
Guthrie, May, 1894
Perry, November, 1894
Norman, June, 1895
Oklahoma City, November, 1895
Guthrie, May, 1896
Oklahoma City, November, 1896
Oklahoma City, May, 1897
Oklahoma City, November, 1897
Oklahoma City, May, 1898
Shawnee, November, 1898
Oklahoma City, May, 1899
Guthrie, May, 1899
Oklahoma City, May, 1900
Oklahoma City, November, 1900
Oklahoma City, May 8, 1901
Oklahoma City, November 13, 1901
Oklahoma City, May 14-15, 1902
Guthrie, November 11, 1902
Guthrie, May 12, 1903
Oklahoma City, November 11, 1903
Oklahoma City, May 11, 1904
Oklahoma City, November 9, 1904
Guthrie, May 10-11, 1905

The Association again reorganized in 1904, with the adoption of a Constitution and plan of organization suggested by the American Medical Association, which itself had been reorganized only three years previously.

A report of the action of the O.S.M.A. in the *Journal* of the American Medical Association stated that the plan of reorganization and acceptance of the standard Constitution was enthusiastically adopted in Oklahoma City during the Annual Meeting on May 1 and further stated that, "This action resulted largely from the phenomenal work done in Texas during the past year, the connection between the professions of the two jurisdictions being very intimate." The *Journal* also reported that there were twenty-six counties in Oklahoma having enough physicians to form in each a county society.

Now organized as a component society of the A.M.A., the O.S.M.A. was entitled to one delegate to the three year old House of Delegates of the A.M.A. The O.S.M.A. Constitution provided that only permanent members for at least two years in the society were eligible for election as a delegate or alternate. Election to the two year terms occurred at the Annual Meeting.

The Judicial Council of the Association was replaced by the Council, further carrying out the A.M.A. standard plan for state societies.

The dues were set at $1.50, which included a subscription to the *Oklahoma Medical News-Journal*.

This important Annual Meeting attracted the large number of 162 physicians from the Oklahoma Territory.

On July 31, 1905, the Oklahoma State Medical Association was issued a charter by the State. Those listed as officers and incorporators were Richard H. Tullis, Lawton, President; Eugene O. Barker, Guthrie, Secretary-Treasurer; W. E. Dickens, Enid; James M. Bonham, Hobart; and J. Henry Barnes, Jet. The headquarters of the Association was given as Guthrie.

Late in 1905, Oklahoma Territory was visited by Dr. J. N. McCormack, National Organizer for the American Medical Association. In a letter published in the *Oklahoma Medical News-Journal*, Eugene O. Barker, Secretary-Treasurer of the O.S.M.A. urged physicians along Dr. McCormack's itinerary to attend the meetings at which the organizer was scheduled to speak. He said that it was "important for the welfare of every reputable physician that we be thoroughly organized in order that we may be prepared to act effectually when Oklahoma becomes a state, which it no doubt will in the near future."

Preliminary conferences had already been held and preparations begun for the amalgamation of the two territorial societies. A united medical front was materializing and every effort was being made by the profession to strengthen it. They had long since recognized that Statehood would mean many changes. With this in mind they were anxious that proper medical legislation be enacted by the new state government and were well aware that only when the profession had organized were improvements realized in the Territories.

Following are the photographs of the O.S.M.A. (Territorial) Presidents, with the exception of R. D. Love, Perry (1901-02), whose photograph is unavailable.



DELOS WALKER
Oklahoma City
1893-94



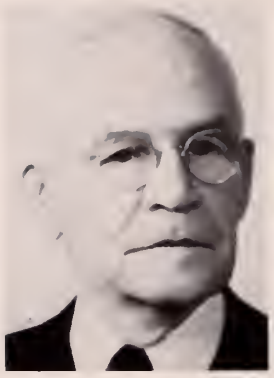
EUGENE O. BARKER
Guthrie
1894-95



T. A. CRAVENS
Oklahoma City
1895-96



C. D. ARNOLD
El Reno
1896-97



JOHN A. HATCHETT
El Reno
1897-98



J. A. OVERSTREET
Kingfisher
1898-99



CHARLES B. BRADFORD
Oklahoma City
1899-1900



CHARLES W. FISK
Muskogee
1900-01



JOHN H. SCOTT
Shawnee
1902-03



A. L. BLESH
Guthrie
1903-04



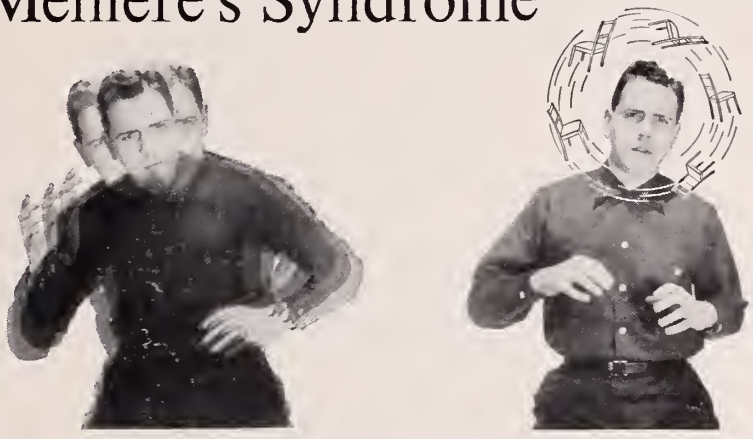
ARCHA K. WEST
Oklahoma City
1904-05



RICHARD H. TULLIS
Lawton
1905-06

Notes on the Diagnosis and Management of "Dizziness"

III. Ménière's Syndrome



1. Paroxysmal Whirling Vertigo. *This consists of sudden attacks of dizziness, often when the patient is at rest or asleep. The patient may feel that he himself is whirling or that fixed objects about him are whirling. The attack usually lasts for a few minutes; occasionally it is severe for weeks or subacute for months.*



2. Subtotal Hearing Loss. *Deafness will usually affect the high tones and it may be unilateral or bilateral. Sometimes the hearing loss is severe and also progressive.*



3. Tinnitus. *This is usually unilateral and present in the ear with greater hearing loss and is without a definite pattern.*

Fewer diagnostic errors[1] will result if a "triad of symptoms" is required of patients with suspected Ménière's syndrome. These are the symptoms of typical Ménière's syndrome:

1. Severe paroxysmal vertigo which may be of two types; either the patient feels that he is whirling or that objects about him are whirling.
2. Fluctuating subtotal hearing loss, usually affecting the higher tones, is noted at the same time as vertigo.
3. Tinnitus, usually unilateral, is associated with the deafness and dizziness.

With Ménière's syndrome there is no definite localization[2] by the Bárány (vestibular reaction) test and results of the caloric test are not diagnostic. Physical examination should rule out disease of the central nervous or cardiovascular systems before a diagnosis is made.

"Treatment with Dramamine®. . . is effective[3] in aborting and preventing attacks of Ménière's syndrome . . . will prevent or arrest attacks of vertigo. It will also reduce the intensity of the tinnitus and so may save some of the hearing in the affected ear."

Dramamine is recommended for Ménière's syndrome as the sole therapy or in combination with other treatment programs.

It is a therapeutic standard also for motion sickness and is useful for relief of nausea and vomiting of radiation sickness and fenestration procedures.

Dramamine (brand of dimenhydrinate) is supplied in tablets (50 mg.); Supposicones® (100 mg.); ampuls (250 mg.); liquid (12.5 mg. in each 4 cc.). G. D. Searle & Co., Research in the Service of Medicine.

1. DeWeese, D. D.: Symposium: Medical Management of Dizziness. The Importance of Accurate Diagnosis, Tr. Am. Acad. Ophth. *58*:694 (Sept.-Oct.) 1954.
2. Jackson, C., and Jackson, C. L. (editors): Diseases of the Nose, Throat, and Ear, Philadelphia, W. B. Saunders Company, 1945, pp. 368; 414.
3. Queries and Minor Notes: Ménière's Syndrome, J.A.M.A., *141*:500 (Oct. 15) 1949.

A new edition of "Dramamine Reviews and Abstracts," containing digests of more than 100 recent articles, is available on request to . . .

SEARLE

P. O. Box 5110, B
Chicago 80, Illinois



E. S. Lain, M.D. Collection—O.U. Archives

1. Delos Walker
2. Eugene O. Barker
3. Ira Bartle
4. Walter Bradford
5. H. C. Todd
6. J. R. Rone
7. W. E. Dicken
8. J. F. Hall
9. A. D. Young
10. C. B. Bradford
11. B. F. Hamill
12. M. A. Kelso
13. unknown
14. Fabrique
15. Fowler Border
16. L. Haynes Buxton
17. S. T. Hulen
18. J. A. Hatchett
19. A. K. West
20. A. B. Cullom
21. George A. Boyle
22. E. S. Ferguson
23. Richard H. Tullis
24. J. M. Postelle
25. J. R. Phelan
26. M. M. Lively
27. unknown
28. J. S. Hartford
29. W. A. Bevan
30. unknown
31. J. A. Overstreet
32. H. H. Wilson
33. unknown
34. Charles S. Bobo
35. C. R. Day
36. R. M. Howard
37. William A. Lytle
38. James McComas
39. J. A. Walker
40. G. A. Wall
41. unknown
42. unknown
43. E. F. Taylor
44. J. H. Barnes
45. Everett S. Lain
46. Hoshall
47. C. W. Williams
48. unknown
49. unknown
50. C. W. Fisk
51. A. L. Blesh

Amalgamation of Indian and Oklahoma Territory Medical Associations

After the turn of the century, the movement for statehood in the Twin Territories gained momentum. Many of the residents of the Indian Territory were campaigning for separate statehood for each territory. A constitution was actually drawn for the State of Sequoyah to be composed solely of Indian Territory. Others, particularly in Oklahoma Territory were clamoring for the creation of a single state composed of both territories. This view eventually won out and President Roosevelt signed the Enabling Act in June, 1906 calling for an election of delegates to a Constitutional Convention. The election was held and the Convention met in the fall of 1906. The following year, on November 16, Oklahoma became a state.

The physicians of Oklahoma, like the members of other professions, anticipated statehood for the territories and were anxious to be professionally organized for it. They realized that the coming of statehood would dictate many changes, not the least of which would be the changes in legislation necessary for the regulation of their profession. In order to have a stronger professional association to deal with the problems, the leaders of the two territorial medical associations resolved to join together in a common organization to work for the betterment of medicine in the soon-to-be state.

Committee on Organization

The Councilors of the Oklahoma State Medical Association (Oklahoma Territory) met with a special committee of the Indian Territory Medical Association at Oklahoma City, Wednesday, July 12, 1905, for the purpose of taking such steps as might be necessary to bring about a union of the two associations. The conference was held in the offices of Dr. W. E. Dicken.

The representatives of the Oklahoma State Medical Association were: W. E. Dicken, Oklahoma City; A. L. Blesh, Guthrie; Eugene O. Barker, Guthrie; Richard H. Tullis, Lawton. The Indian Territory Medical Association was represented by B. F. Fortner, Vinita; J. W. Gilbert, Roff; E. N. Wright, Olney; Claude A. Thompson, Muskogee; LeRoy D. Long, South McAlester. The Indian Territory group had been appointed at a meeting of the Indian Territory Medical Association, June 20, 1905. Following organization of the conference, Doctor Dicken was elected Chairman and Doctor Long, Secretary.

The Committee on Resolutions, appointed by Chairman Dicken, presented this resolution for the consideration of the conference:

> Whereas, It seems certain that Oklahoma and Indian Territory will ultimately be admitted to the Union of States as one state, and;
>
> Whereas, The interests of the medical profession of the two territories are identical; be it
>
> Resolved, therefore, that this conference committee, representing the Medical Associations of the two Territories, recommend to our respective associations an early union of the two Associations, upon the following terms, to-wit:
>
> First—That the next annual meeting of the two Associations be held in joint session at Oklahoma City on the second Tuesday of May 1906, and that the house of delegates of each body proceed to reorganize the two Associations into one body, to be known as the Oklahoma State Medical Association, and that this matter be made preferred business, and shall have precedence over all other business.
>
> Second—That the scientific programme following shall be rendered jointly, and that the secretaries of the two Associations shall confer with each other in the preparation of this programme.
>
> Third—That the president and secretary of the Oklahoma State Medical Association shall preside over and record the minutes of all the sessions of the house of delegates, and that the president and secretary of Indian Territory Association shall preside over and record the minutes of all scientific sessions of the two bodies; provided, however, that the two official bodies may exchange courtesies if they so desire.
>
> Fourth—We further recommend that In-

dian Territory Medical Association proceed at once to the organization of the recording districts of Indian Territory, such organizations to correspond to the county societies in Oklahoma Territory, and that said recording districts be divided into five councilor districts, as the counties are in Oklahoma, and that the present five councilors of Indian Territory Medical Association be each apportioned a district, and that it shall be the duty of each of the said councilors to proceed at once to the organization of his district, and that charters for these unit organizations shall be issued after the consolidation of the two societies, and under the authority and seal of the state.

We recommend further that the legislative committee of the two Associations meet in joint session at Oklahoma City on the fourth Tuesday of November, 1905, for the purpose of formulating laws relative to the practice of medicine, and vital statistics, and sanitation and allied subjects, the same to be submitted to, and for approval of, the house of delegates of the joint session.

Fifth—Provided further, That in case of emergency, which in the opinion of the representatives of the two societies here assembled demands immediate action, the presiding officer of these representatives here assembled, shall notify the presidents of the two Associations, and said presidents shall thereupon call an extraordinary session of the house of delegates and legislative committes of each society to meet in joint session at such time and place as in our judgment shall be deemed expedient.

(Signed) LeRoy Long, A. L. Blesh,
Committee.

The report of the Resolutions Committee was adopted unanimously and the meeting was adjourned. A meeting of the legislative committee was set in November, 1905 at the Lee Huckins Hotel in Oklahoma City. Only two members, Eugene O. Barker and A. L. Blesh, however, were in attendance.

On March 20, 1906 a special meeting of the Indian Territory Association was held in South McAlester in anticipation of the joint meeting. In a letter published in the *Oklahoma Medical News-Journal*, President Berry exhorted the members of the Indian Territory Medical Association to attend the forthcoming joint meeting in Oklahoma City. "It won't hurt you to lay off two or three days to rub up against your professional brother and compare notes," he wrote. Much enthusiasm for the joint meeting was evinced by the members of the Indian Territory Medical Association gathered at South McAlester.

Arrangements were made with all the railroads in Oklahoma for physicians to travel to the Oklahoma City meeting at reduced rates for the round trip. Full price was paid for the trip to the meeting and the return trip was made for one third regular price.

Organization

In separate meetings on May 7, 1906, the House of Delegates of each territorial organization voted in favor of amalgamation. There followed then the organization of the Oklahoma State Medical Association, representing the medical profession of both territories.

The newly amalgamated Association was organized under much the same plan as that adopted by the territorial societies under the auspices of the American Medical Association. A Council was organized of the representatives of the County Societies of Oklahoma Territory and the District Societies of the Indian Territory. Representing Oklahoma Territory were:

First District: Gregory A. Wall, Oklahoma City
Second District: A. L. Blesh, Guthrie
Third District: Everett S. Lain, Weatherford
Fourth District: Ney Neel, Mangum
Fifth District: J. Henry Barnes, Helena

The Indian Territory comprised the lands of a number of Indian nations and tribes, which was not regularly divided into counties. The constitutent societies of the Indian Territory, therefore, were divided into districts. The Councilors from these districts were:

Northern District: F. M. Duckworth, Claremore
Western District: B. J. Vance, Checotah
Central District: E. N. Wright, Olney
Southern District: H. P. Wilson, Wynnewood
At Large: LeRoy D. Long, South McAlester

After its organizational meeting the Council duly reported to the House of Delegates in the first meeting May 8. It recommended that the House appropriate $100 for the relief of the physicians of San Francisco who suffered losses in the great earthquake. The appropriation for the expenses of the Secretary-Treasurer was increased from $75 to $150 per year on recommendation of the Council. An audit of the books of the Secretary-Treasurer by the Council revealed

that the Oklahoma State Medical Association Secretary-Treasurer received from the Indian Territory association and constituent societies a total of $619.26 and from the old Oklahoma State Medical Association the sum of $542.92, making the total assets of the new organization $1,162.18.

House of Delegates

For the purposes of this first meeting, in the apportionment of the House of Delegates, the Indian Territory constitutent societies were allowed a total of 15 delegates, because the districts were fewer in number than the organized counties of Oklahoma Territory. Each organized county society was allotted one delegate for each 25 members or fraction thereof. The counties and districts were represented as follows:

Oklahoma Territory

Blaine County: G. C. Brandes
Caddo County: Charles R. Hume
Canadian County: J. W. Muzzy
Cleveland County: Charles S. Bobo
Custer County: Everett S. Lain
Garfield County: George A. Boyle
Grant County: Lewis J. Moorman
Greer County: T. J. Dodson and Ney Neel
Kingfisher County: A. B. Cullom
Kiowa County: A. W. Holland
Lincoln County: A. M. Marshall
Logan County: John R. Hamill
Oklahoma County: C. R. Day, Lea A. Riely, Gregory A. Wall
Payne County: S. M. Barnes
Washita County: J. S. Hartford
Woodward County: J. A. Bowling

Indian Territory

Southern District: J. R. Runyan, J. D. Batson, John R. Callaway
Central District: Joseph S. Fulton, W. G. Ramsay, James L. Shuler, R. H. Pemberton, W. B. Pigg, E. N. Allen
Northern District: W. L. McWilliams, A. W. Herron, R. H. Harper
Western District: Henry A. Howell, George H. Garrett, C. W. Heitzman

The sessions of the House of Delegates were presided over by Dr. Newton Rector, Hennessey, First Vice-President of the Oklahoma State Medical Association. He had become acting President following the death in December, 1905, of Dr. Richard H. Tullis, Lawton, President. Dr. Eugene O. Barker served the amalgamation meeting as Secretary.

The first order of business of the House, following the certification of the above listed delegates, was to consummate the amalgamation and to adopt the Constitution and By-Laws prepared by the American Medical Association for state associations.

The House next set the dues at $1.50. The previous year, in a meeting in Tulsa, the Indian Territory Medical Association had agreed on dues of $2.00 and a sum of money had been collected on this basis. The Secretary was instructed at this time to refund to the constituent societies any money in excess of the newly established dues of $1.50.

The House adopted a resolution recognizing the close relationship between pharmacy and medicine and calling upon manufacturing pharmacists to discontinue making "nostrums." The President was directed to appoint a committee to prepare resolutions commending the American Medical Association *Journal* and certain lay periodicals for their activities in exposing patent medicines and nostrum frauds. This subject was to remain uppermost in the deliberations and in the forefront of the activities of the Oklahoma State Medical Association for many years to come.

On the final day of the meeting officers for the ensuing year were elected by the House of Delegates. The following physicians were elected by acclamation:

Dean: C. D. Arnold, El Reno
President: B. F. Fortner, Vinita
First Vice-President: M. A. Kelso, Enid
Second Vice-President: Walter C. Bradford, Shawnee
Third Vice-President: Floyd E. Warterfield, Holdenville
Secretary-Treasurer: Eugene O. Barker, Guthrie
A.M.A. Delegates (1906): Fred S. Clinton, Tulsa; John A. Hatchett, El Reno
(1907-08): Virgil Berry, Wetumka; Archa K. West, Oklahoma City

The honorary designation "Dean," which apparently had not previously existed and which lapsed after this initial appearance, was included in the list of officers. The designation of dean went to a veteran and much venerated physician of Oklahoma Territory, Dr. C. D. Arnold of El Reno. Following the election of Councilors, Shawnee was chosen

as the site for the next Annual Meeting on the second Tuesday and Wednesday in May, 1907.

Committees

The important Committee on Public Policy Legislation was charged with the responsibility for development of medical legislation. The committee was delegated the power to call a meeting of the House of Delegates if necessary.

The Committee on Insurance Examinations, composed of John R. Hamill, Guthrie, Chairman; Floyd E. Warterfield; and W. E. Dicken, presented a resolution which was adopted by the House unanimously. The House accepted the recommendation to the constituent societies that a minimum fee of $5.00 be established for each insurance examination made. Furthermore, contract practice at anything less than the minimum rate was condemned and the members forbidden to do so.

The Attorney General and the Territorial Board of Health were commended by the Association for their untiring efforts in the revocation of the certificate of a person illegally practicing medicine. Such effort on the part of the Oklahoma State Medical Association in the regulation of the practice of medicine has continued until the present day. Eternal vigilance on the part of organized medicine in Oklahoma has been the price of the security of the public against the fraudulent practitioner.

President Fortner made the following appointments to the Standing Committees for the year 1906-07:

Public Policy and Legislation
B. F. Fortner, Vinita
R. T. Edwards, Oklahoma City
E. N. Allen, McAlester
T. J. Dodson, Mangum
Eugene O. Barker, Guthrie

Scientific Work
A. T. Grayson, Shawnee
Fred S. Clinton, Tulsa
Eugene O. Barker, Guthrie

Necrology
David A. Meyers, Lawton
Louis Bagby, Vinita
M. M. Lively, Blackwell

Medical Education
E. N. Allen, McAlester
Charles W. Fisk, Kingfisher
Fred S. Clinton, Tulsa

Organization of the Medical Association of the Southwest
Member
A. L. Blesh, Guthrie
Virgil Berry, Wetumka
F. H. Clark, El Reno
B. F. Fortner, Vinita
Gregory A. Wall, Oklahoma City
Archa K. West, Oklahoma City
Alternate
Eugene O. Barker, Guthrie
Floyd E. Warterfield, Holdenville
John A. Hatchett, El Reno
Joseph S. Fulton, Atoka

Provision was made for seven scientific sections for the 1907 meetings. The following physicians were appointed chairmen:

General Medicine, Reuben P. Tye, Chickasha
Surgery, U. L. Russell, Oklahoma City
Obstetrics and Gynecology, W. T. Tilly, Durant
State Medicine, James L. Shuler, Durant
Pediatrics, A. Griffith, South McAlester
Pathology, E. Eugene Rice, Shawnee
Ophthalmology and Otology, John Hamill, Guthrie

Scientific Program

The first scientific session of the 1906 meeting convened on the morning of May 8, following the session of the House of Delegates. Dr. Virgil Berry, Indian Territory Medical Association President, was in the chair. Dr. James Gilbert, Roff, delivered the invocation. An address of welcome was delivered by Dr. Archa K. West of Oklahoma City, the host city, and a response on behalf of the Oklahoma Association was given by A. L. Blesh, Guthrie. Doctor Berry responded in behalf of the Indian Territory Association.

Dr. Newton Baker, acting President of the Oklahoma State Medical Association (Territorial) considered four vital points in his annual address: (1) Union of the societies on a proper and suitable basis as one society; (2) medical legislation; (3) the needless multiplication of medical societies, colleges and journals; and (4) recent action of insurance companies in reducing local examiners' fees. In emphasizing the importance of proper medical legislation in view of the approach-

ing statehood, Dr. Baker reminded the assembled physicians that, "Already the camp of the quack and imposter who preys upon the credulity of the sick, robbing them to the verge of the grave and like vultures feeding even on the carcasses of the dead, is astir to prevent legislation of any kind that will interfere with their nefarious practices." He further urged the legislative committee to "be awake to the importance of the hour that has struck" and that the association back them in their efforts. Oklahoma was the last refuge and hope for the fraudulent practitioners of medicine to gain legal recognition, as with other professions and businesses.

Doctor Berry likewise called for the profession to strengthen its organization so that they could better prepare for the struggle for adequate medical legislation. He also pledged the members of the Indian Territory Association to full cooperation with the physicians of Oklahoma Territory in carrying out their joint program for the advancement of medicine in Oklahoma.

The annual addresses by the presidents were followed by the reading and discussion of scientific papers. First was a section devoted to the Practice of Medicine, which consisted of papers on "Fever," by Charles W. Fisk, Kingfisher; "Faith vs. Physic," by I. E. Stryker, Lawton; "Radical and Conservation Therapeutics," by Winnie M. Sanger, Oklahoma City; and "X-Ray Treatment of Affections of the Skin," by J. N. Scott, Kansas City, Missouri.

The Section on Surgery presented papers on the following topics: "Appendicitis," by Virgil A. Voyle, Gotebo; "Surgical Treatment of Appendicitis," by E. N. Allen, South McAlester; "Pyloric Obstruction," by John A. Hatchett, El Reno; "Intestinal Paralysis, following Laparotomy," by E. N. Wright, Olney; and "Gall Bladder Disease," by LeRoy D. Long, South McAlester.

The papers presented for the Section on State Medicine were "Medical Education," by Archa K. West, Dean of the Epworth Medical College and "Water Supplies of Cities," by J. C. McNees, Ardmore.

The Section on Pediatrics included presentation of the following papers: "Diphtheria," by J. D. Batson, Marietta; "Pediatrics and the General Practitioner," by C. S. Petty, Guthrie; "Practical Points in the Management of Summer Diseases of Children," by John R. Callaway, Pauls Valley; "Broncho-Pneumonia," by G. M. Tralle, Purcell.

There was a section of Pathology, but the papers were read by title only. A Section on Gynecology heard a paper by Robert M. Howard, Oklahoma City, on "Solid Ovarian Tumors"; Joseph S. Fulton, Atoka, spoke on "Puerperal Infection"; and G. Fowler Border, Mangum, exhibited a large ruptured aortic aneursym together with the heart and gave a history of the case.

While assembled for the reading of the above papers the Association addressed a telegram, signed by the President and Secretary, to Senator Albert Beveridge calling for immediate statehood for Oklahoma and Indian Territories.

The meeting adjourned and the physicians retired to the park to partake of refreshments provided by the Oklahoma County Society.

The Annual Meetings since 1906 have been held in the following cities:

1906 May 7-9, Oklahoma City, Grand Avenue Hotel
1907 May 13-15, Shawnee
1908 May 12-13, Sulphur Springs, Artesian Hotel
1909 May 11-13, Oklahoma City, White Temple Baptist Church
1910 May 10-12, Tulsa
1911 May 9-11, Muskogee, Leighton Building
1912 May 7-9, Shawnee, Chrisney Block
1913 May 13-15, Enid, First Baptist Church
1914 May 12-14, Guthrie
1915 May 11-13, Bartlesville, Hotel Maire
1916 May 9-11, Oklahoma City, Irving School Building
1917 May 8-10, Medicine Park Hotel (Lawton)
1918 May 14-16, Tulsa, Old Highschool Building, Fourth and Boston
1919 May 20-22, Muskogee, Old Courthouse Building, Second and Court
1920 May 18-20, Oklahoma City, Huckins Hotel and Chamber of Commerce
1921 May 17-19, McAlester, First Baptist Church
1922 May 9-11, Oklahoma City, State Capitol Building
1923 May 15-17, Tulsa, Municipal Building
1924 May 13-15, Oklahoma City, Shrine Auditorium, Sixth and Robinson
1925 May 12-14, Tulsa, Mayo Hotel
1926 June 22-24, Oklahoma City, Shrine Auditorium, Sixth and Robinson
1927 May 4-6, Muskogee, Masonic Temple
1928 May 17-19, Tulsa, Mayo Hotel and Shrine Auditorium
1929 May 27-29, Oklahoma City, Huckins Hotel and New University of Oklahoma Medical School Building

1930 May 26-28, Shawnee, Aldridge Hotel and High-school Building
1931 May 11-12, Oklahoma City, Shrine Auditorium
1932 May 24-26, Tulsa, Mayo Hotel
1933 May 15-17, Oklahoma City, Skirvin Hotel
1934 May 21-23, Tulsa, Mayo Hotel
1935 May 13-15, Oklahoma City, Skirvin Hotel
1936 April 6-8, Enid, Youngblood and Oxford Hotels, Criterion Theater
1937 May 10-12, Tulsa, Mayo Hotel
1938 May 9-11, Muskogee, Severs Hotel
1939 May 1-3, Oklahoma City, Skirvin Hotel
1940 May 6-8, Tulsa, Mayo Hotel
1941 May 19-21, Oklahoma City, Skirvin Hotel
1942 April 22-24, Tulsa, Coliseum
1943 May 10-12, Oklahoma City, Skirvin Hotel
1944 April 24-26, Tulsa, Mayo Hotel
1945 Did not meet because of the war
1946 May 1-3, Oklahoma City, Skirvin Hotel
1947 May 14-16, Tulsa, Mayo Hotel
1948 May 17-19, Oklahoma City, Skirvin Hotel
1949 May 16-19, Tulsa, Mayo Hotel
1950 June 5-7, Oklahoma City, Zebra Room, Municipal Auditorium
1951 May 21-23, Tulsa, Mayo Hotel
1952 May 19-21, Oklahoma City, Zebra Room, Municipal Auditorium
1953 April 13-15, Tulsa, Mayo Hotel and Cimarron Ballroom
1954 May 10-12, Oklahoma City, Zebra Room, Municipal Auditorium
1955 May 8-10, Tulsa, Cimarron Ballroom
1956 May 7-9, Oklahoma City, Zebra Room, Municipal Auditorium

History of O.S.M.A.

THE MEMBERSHIP

The basis for active or regular membership in the Association has always been membership in a component society—county or district. To be eligible for membership in a component society a physician must have been licensed to practice in Oklahoma and have been in active practice. He must have graduated from a recognized medical school and must have accepted the Code of Ethics of the American Medical Association. Certification to the State Association by the component society and prompt payment of dues constitutes evidence of membership in the Oklahoma State Medical Association. Members in the State Association are automatically members of the American Medical Association. The Oklahoma Association was the first state association to make membership in the American Medical Association mandatory.

The number of physicians who were members at the time of the amalgamation was 914. The membership varied from year to year until 1940, showing an overall increase. From that time until the present year, 1956, a steady increase in membership is evident. The number as of December 31, 1955, was 1,710. The fluctuation in number of members prior to 1940 can be attributed to shifts in population, depression, greater or lesser activity on the part of county society secretaries, vitality and attractiveness of the program of the State Association, and to the periodical increases in the amount of dues and assessments.

The annual dues were established in 1906 at $1.50. By 1936 dues had been increased to $8.00 and two years later were $12.00. In 1939 the Council voted to include a subscription to the *Journal* in the dues. A $10.00 increase in dues was voted in 1946 to become effective in 1947. The dues were again increased in 1949 and set at $42.00. The House of Delegates also approved the $25.00 per capita assessment by the American Medical Association for public relations. Oklahoma was the first state association to approve this assessment. Oklahoma State Medical Association dues are currently $67.00.

Throughout the development of the organization provision has been made from time to time for other classifications of membership.

Junior Membership

This classification was devised for physicians serving as interns or residents on full time. The Junior Members pay no dues and are ineligible for election to office in the Association. This status is held only during the period of hospital training. A component society cannot count the Junior Members in the computation of the number of delegates to the Association.

Associate Membership

A component society or the Council petitions the House of Delegates for Associate Membership for any person who is not qual-

ified for any of the other membership classifications. Such a person need not be a physician.

Special Service Membership

During the Second World War, many Oklahoma physicians were called into military service immediately upon finishing their medical education. They had not yet established themselves in practice and were not members of a component society. In 1944, this special category was authorized by an amendment to the By-Laws. Such physicians are exempt from the payment of dues and may not hold office or vote.

Honorary Membership

This classification in the Association was formally established by the House of Delegates in Annual Session at Oklahoma City in 1933. The designation of Honorary Member dates back, however, to at least as early as 1907 when B. F. Fortner, M.D., Vinita, dean of organized medicine in the Indian Territory, was made an honorary member.

Prior to the amalgamation the Oklahoma territorial association used the Honorary classification for distinguished physicians who were not in practice in Oklahoma.

The By-Laws presently provide that any physician, a member of the Association for at least the preceding five years, who by reason of ill health or age shall retire from the active practice of medicine, or who has been engaged in the active practice of medicine fifty years or more and whose services to humanity and his profession has been so unusually outstanding as to merit honorary recognition may be placed on the Honorary Membership roll. The component society of which the physician is a member presents the petition to the Council for its consideration and approval before the next Annual meeting.

The approval of the House of Delegates, by a majority vote at the Annual Session, is necessary to place such eligible members on the Honorary Membership Roll. Such members have all the privileges of active membership except holding office, and are not required to pay dues or assessments. They are considered the same as fully-paid members in computing the membership of the county societies for the purpose of determining the number of delegates the societies are entitled to send to the House of Delegates.

A total of 116 members have been named to the Honorary Member roll:

Aderhold, T. M., El Reno
Alexander, Robert M., Paoli
Alford, J. M., Oklahoma City
Anderson, Parkey H., Anadarko
Baker, Roscoe C., Enid
Barker, Charles E., Oklahoma City
Barker, Eugene O., Guthrie
Bassman, Caroline, Claremore
Beach, Calbert H., Glencoe
Beesley, W. W., Tulsa
Bennett, D. W., Sentinel
Bitting, B. T., Enid
Blair, Samuel, Apache
Bobo, Charles S., Norman
Boyd, Thomas M., Norman
Brookshire, J. E., Tulsa
Brown, Paul R., Tulsa
Browning, J. W., Geary
Bushyhead, J. C., Claremore
Cain, P. L., Albany
Camp, Earl D., Buffalo
Cates, Albert M., Oklahoma City
Cherry, G. P., Mangum
Clapper, E. P., Waynoka
Clinton, Fred S., Tulsa
Clutter, W. H., Oklahoma City
Coley, A. J., Oklahoma City
Comp, G. A., Manitou
Cotton, L. W., Enid
Cook, W. Albert, Tulsa
Cullum, J. E., Earlsboro
Duncan, J. C., Forgan
Ewing, Finis W., Muskogee
Freeman, W. H., Hobart
Frizzell, J. T., Clinton
Fortner, B. F., Vinita
Gossom, K. D., Clinton
Grantham, Elizabeth, Alva
Griffin, David W., Norman
Hailey, W. P., Haileyville
Hall, Gilbert H., Tulsa
Harber, J. H., Seminole
Harms, J. W., Cordell
Harper, J. E., Cushing
Heatley, John E., Oklahoma City
Hill, R. M. C., McLoud
Holbrook, Ray W., Perkins
Hooper, Joel S., Muskogee
Howell, O. E., Norman
Hughes, J. E., Shawnee
Hume, Charles R., Anadarko
Hunt, Isaac S., Freedom
Jester, J. A., Elk City
Jones, J. E., Hollis
Jones, John Paul, Dill City
Kerley, W. W., Anadarko
Kingman, W. H., Bartlesville
Lain, Everett S., Oklahoma City
LaMotte, George A., Oklahoma City
Lewis, E. F., Ada

Livermore, W. H., Chickasha
Loyd, E. M., Taloga
Lucas, A. C., Castle
Lyon, James I., Edmond
Maupin, C. M., Waurika
Mayginnes, Patrick H., Tulsa
McClelland, Wilson, McAlester
McClure, P. L., Ft. Cobb
McHenry, D. D., Oklahoma City
McIlwaine, William, Lone Wolf
McKeel, Sam A., Ada
McMurry, James F., Sentinel
Morrow, John A., Sallisaw
Myers, David A., Lawton
Nesbitt, P. P., Tulsa
Niemann, George H., Ponca City
Parks, S. M., Bartlesville
Pigford, Albert W., Tulsa
Postelle, J. M., Oklahoma City
Ray, W. T., Gould
Reed, Horace, Oklahoma City
Renfrow, T. J., Billings
Reynolds, James L., Tulsa
Rice, O. W., McAlester
Richardson, D. P., Union City
Richey, S. M., Tulsa
Riely, Lea A., Oklahoma City
Ritter, J. M., Roosevelt
Rogers, McLain, Clinton
Ross, S. P., Oklahoma City
Roth, Albert W., Tulsa
Sexton, C. E., Stillwater
Shackelford, T. T., Haskell
Shipman, W. H., Bartlesville
Silverthorne, C. R., Woodward
Simpson, N. N., Henryetta
Speed, Henry K., Sayre
Stephenson, W. L., Aline
Stough, Daniel F., Sr., Geary
Street, O. J., Gould
Stults, John Samuel, Altus
Tabor, George R., Oklahoma City
Tolleson, William A., Eufaula
Walker, John R., Enid
Wall, Gregory A., Tulsa
Walton, F. L., Muskogee
Wann, C. E., Albany
Warterfield, Floyd E., Muskogee
Weber, S. G., Bartlesville
Welch, A. J., McAlester
West, George W., Eufaula
White, J. Hutchings, Muskogee
Willour, Leonard S., McAlester
Wilson, H. P., Wynnewood
Yeargan, W. M., Hollis
Young, A. M., Jr., Oklahoma City

Life Membership

The Association was desirous of honoring its members who were no longer in full-time active practice by reason of ill heath or age or who had practiced for fifty years or more. The House of Delegates, therefore, in Annual Session in 1947, authorized the establishment of this classification. Physicians who are otherwise qualified and have been members of the Association for at least the preceding five years may be nominated for Life Membership by the component society of which they are members.

Election to Life Membership relieves the member of the obligation of dues and assessments. Such members enjoy all the rights and privileges of membership in the Association except the right to hold office. Life members are considered as fully paid members in computing the membership of the county societies for the purpose of determining the number of delegates to the House of Delegates.

The Life Membership Roll includes 178 physicians:

Alexander, Lin, Okmulgee
Anderson, Fred A., Claremore
Andreskowski, W. T., Elk City
Andrews, Lelia E., Oklahoma City
Angus, Haney A., Lawton
Arnold, A. M., Claremore
Athey, J. V., Bartlesville
Baird, Wilson D., Oklahoma City
Baker, Roscoe C., Enid
Barber, George S., Lawton
Barker, E. R., Healdton
Baum, E. Eldon, Britton
Baxter, George S., Shawnee
Berry, Thomas M., Eldorado
Blakemore, Jesse L., Muskogee
Bonnell, W. L., Chickasha
Boon, Udonna C., Chickasha
Boswell, H. D., Henryetta
Breeo, Joseph G., Ada
Brown, R. A., Prague
Bryant, William C., Chouteau
Burns, S. L., Stonewall
Cailey, Leo F., Oklahoma City
Calhoun, Charles E., Sand Springs
Callaway, John R., Pauls Valley
Campbell, Hiram G., Tecumseh
Cannon, Roy F., Miami
Cary, W. L., Reydon
Chamberlain, Elizabeth, Bartlesville
Charbonnett, Pierre N., Tulsa
Childs, J. W., Tulsa
Clark, J. B., Atoka
Clarkson, A .W., Valliant
Cochran, J. E., Byars
Cody, Robert D., Centrahoma
Collins, D. B., Waurika
Cook, William H., Chickasha
Cornwell, N. L., Coyle
Coulter, Thomas B., Tulsa
Craig, J. W., Miami
Crow, Emory S., Olustee
Davis, George M., Bixby

Day, John L., Woodward
Dean, Samuel C., Howe
Dixon, Ambrose, Hennessey
Dougan, A. L., Carmen
Downey, D. S., Chickasha
Ellis, Henry A., Kiowa
Farris, H. Lee, Tulsa
First, Francis R., Sr., Checotah
Flesher, Thomas H., Edmond
Gallaher, William M., Shawnee
Gerard, G. R., Chickasha
Gilliam, W. C., Spiro
Gray, Dan F., Guthrie
Grosshart, Paul, Tulsa
Haas, H. R., Disney
Hahn, L. A., Guthrie
Hamilton, S. H., Calvin
Harbison, James E., Oklahoma City
Harbison, Edgar Frank, Oklahoma City
Hardy, I. V., Medford
Hardy, Walter, Ardmore
Harris, Bunn, Jenks
Harris, D. S., Drummond
Harrison, J. E., Oklahoma City
Haskett, Paul E., Oklahoma City
Hathaway, Alfred H., Mountain View
Hathaway, E. P., Lawton
Hawn, W. T., Binger
Hayes, R. B., Guymon
Henderson, Finis W., Tulsa
Hennings, A. E., Tuttle
Higgins, H. A., Ardmore
Hill, C. B., Guthrie
Hines, S. J. T., Tahlequah
Hobbs, A. F., Hinton
Hoke, Clarence C., Tulsa
Howard, Robert M., Oklahoma City
Huston, H. E., Cherokee
Joblin, W. R., Porter
Johnson, H. L., Woodward
Johnson, R. R., Sand Springs
Johnson, Walter, Ardmore
Jones, Ralph E., Nicoma Park
Kayler, Robert C., McLoud
Kelleam, E. A., Wright City
Kerley, W. W. Anadarko
Kilpatrick, E. S., Elk City
King, Emory W., Bristow
Lansden, J. B., Granite
Larkin, Henry W., Guthrie
Leachman, Thad C., Woodward
Le Blanc, William, Ochelata
LeHew, J. L., Pawnee
LeMaster, D. W., Wayne
Leslie, Samuel B., Sr., Okmulgee
Lewis, Powell K., Sapulpa
Lhevine, Morris B., Tulsa
Love, Robert S., Oklahoma City
Lynch, Thomas J., Tulsa
Mabry, William L., Leedey
Martin, Joseph T., Oklahoma City
Matheney, J. C., Okmulgee
Maupin, C. M., Waurika
Mayfield, Warren T., Norman
McBrayer, William H., Idabel
McCalib, D. C., Colbert
McConnell, L. H., Altus
McCreery, R. C., Erick
McMillan, C. B., Gracemont
McVey, G. M., Verden
Miner, James L., Tulsa
Minor, S. W., Hinton
Mitchener, W. C., Okmulgee
Mixon, A. M., Spiro
Mohrman, Silas S., Tulsa
Moth, M. V., Oklahoma City
Murray, Silas, Tulsa
O'Leary, D. W., Norman
Perry, Daniel L., Tulsa
Petty, C. S., Guthrie
Pierson, Orra A., Woodward
Pigford, R. C., Tulsa
Pine, John S., Oklahoma City
Piper, Arthur S., Enid
Poer, E. M., Mangum
Presson, L. C., Tulsa
Price, J. T., Seminole
Ralston, Benjamin W., Commerce
Reck, John A., Oklahoma City
Reeder, H. M., Konawa
Reese, C. B., Sapulpa
Renegar, J. F., Tuttle
Rhodes, Robert E. Lee, Tulsa
Rhodes, William H., Enid
Rice, O. W., McAlester
Robberson, Marvin E., Sr., Wynnewood
Roberts, D. D., Enid
Roberts, S. P., Nowata
Rogers, Frank W., Carnegie
Rogers, James W., Tulsa
Rucks, W. W., Sr., Oklahoma City
Rutherford, S. C., Locust Grove
Sanger, Fenton M., Oklahoma City
Sanger, Winnie M., Oklahoma City
Sawyer, R. E., Durant
Scott, M. B., Delaware
Seaborn, T. L., Ada
Seba, W. E., Leedey
Shelton, John W., Oklahoma City
Shi, Augustin H., Stratford
Smith, Joseph G., Bartlesville
Somerville, O. S., Bartlesville
Spence, W. P., Sayre
Stalker, Harry A., Pond Creek
Stallings, T. W., Tulsa
Stoner, R. W., Checotah
Taylor, William M., Oklahoma City
Tedrowe, C. W., Woodward
Templin, Oscar E., Alva
Tompkins, John E., Yukon
Torrey, John P., Bartlesville
Trainor, William J., Tulsa
Venable, Sidney C., Tulsa
Wait, Will C., McAlester
Walker, I. D., Tonkawa
Walker, Roscoe, Tulsa
Wallace, Jesse E., Tulsa
Waltrip, Jesse R., Yale
Watkins, Barton H., Hobart
Westfall, L. M., Oklahoma City

Wharton, J. L., Depew
Williams, C. O., McAlester
Williams, J. Clay, Durant
Williams, R. W., Anadarko
Wolff, Llewellyn G., Okarche
Worten, Divonis, Pawhuska

Fifty Year Award

The Oklahoma State Medical Association eight years ago established the Fifty Year Award for recognition of half a century in the practice of medicine. On May 19, 1948, as part of the program of the President's Inaugural Dinner-Dance, the first Awards were presented to twelve distinguished members of the Association. Master of Ceremonies for the affair in the Silver Glade Room of the Skirvin Tower Hotel in Oklahoma City was Onis G. Hazel, M.D., Oklahoma City.

To be eligible for the Fifty Year Award, a physician must have been a member of the Association for the preceding five years and have been engaged in the active practice of medicine for fifty years not necessarily the entire time in Oklahoma. A physician so qualified is recommended for the honor by his county or district society. The honorees are duly recognized in the Annual Meeting of the House of Delegates and their names are inscribed on a special roll maintained in the office of the Executive Secretary of the Association.

All presentations of the Award since the first have been made in the honored physicians' home communities. Often on these occasions many appreciative friends, as well as colleagues, participate. The President or other appropriate officer of the Association personally presents a certificate and gold lapel pin.

Appropriate recognition for fifty years of service to humanity has been accorded a total of 111 physicians:

Alford, J. M., Oklahoma City
Allison, John, Tahlequah
Andrews, Lelia E., Oklahoma City
Angus, Haney A., Lawton
Athey, J. V., Bartlesville
Baird, Wilson D., Oklahoma City
Baker, G. W., Walters
Baker, Roscoe C., Enid
Barker, E. R., Healdton
Barry, J. R., Picher
Beam, J. P., Arnett
Blakemore, Jesse L., Muskogee
Boone, Udonna C., Chickasha
Bruton, L. D., Muskogee
Bungardt, A. H., Cordell
Burns, S. L., Stonewall
Byrd, Wallace, Coalgate
Byrum, James M., Shawnee
Calhoun, Charles E., Sand Springs
Callaway, John R., Pauls Valley
Campbell, Hiram G., Tecumseh
Carloss, T. C., Morris
Clark, J. B., Atoka
Cody, Robert D., Centrahoma
Coley, A. J., Oklahoma City
Collins, D. B., Waurika
Collins, E. L., Panama
Comp, G. A., Manitou
Cook, W. Albert, Tulsa
Coppedge, Omer C., Bristow
Cox, J. L., Ardmore
Craig, J. W., Miami
Crow, Emory S., Olustee
Dean, Samuel C., Howe
Farris, H. Lee, Tulsa
Flesher, Thomas H., Edmond
Franklin, Onis, Broken Arrow
Fulton, Joseph S., Atoka
Gallaher, William M., Shawnee
Gee, Lemuel E., Broken Bow
Gee, Robert L., Hugo
Gray, Dan F., Guthrie
Hahn, L. H., Guthrie
Hall, Gilbert H., Tulsa
Harbison, James E., Oklahoma City
Hardy, I. V., Medford
Hardy, Walter, Ardmore
Harris, D. S., Drummond
Hathaway, Alfred H., Mountain View
Hathaway, W. G., Lone Grove
Higgins, H. A., Ardmore
Holbrook, Ray W., Perkins
Howard, Robert M., Oklahoma City
Joblin, W. R., Porter
Jones, John Paul, Dill City
Kayler, Robert C., McLoud
King, Emory W., Bristow
Lain, Everett S., Oklahoma City
LaMotte, George A., Oklahoma City
Lansden, J. B., Granite
Lawson, Johnson S., Clayton
Leachman, Thad C., Woodward
Le Blanc, William, Bartlesville
LeHew, J. L. Pawnee
Leslie, Samuel B., Sr., Okmulgee
Lyon, James I., Edmond
Matheney, J. C., Okmulgee
Maupin, C. M., Waurika
Mayginnes, Patrick H., Tulsa
McKeel, Sam A., Ada
Mixon, A. M., Talihina
Moorman, Lewis J., Oklahoma City
Moreland, J. T., Idabel
Murdock, Harry Dale, Tulsa
Newman, O. C., Shattuck
Norwood, F. H., Prague
Petty, C. S., Guthrie
Pierson, Orra A., Woodward
Pine, John S., Oklahoma City

Postelle, J. M., Oklahoma City
Ralston, Benjamin W., Commerce
Reck, John A., Oklahoma City
Reed, Horace, Oklahoma City
Renegar, J. F., Tuttle
Reynolds, John, Muskogee
Rhodes, William H., Enid
Rice, O. W., McAlester
Richardson, D. P., Union City
Riely, Lea A., Oklahoma City
Risser, Arthur S., Blackwell
Rogers, Frank W., Carnegie
Ross, S. P., Ada
Rucks, W. W., Sr., Oklahoma City
Sexton, C. E., Stillwater
Shelton, John W., Oklahoma City
Shi, Augustin H., Stratford
Smith, Ralph V., Oklahoma City
Somerville, O. S., Bartlesville
Taylor, William M., Oklahoma City
Tedrowe, C. W., Woodward
Thompson, M. K., Muskogee
Tolleson, William A., Eufaula
Torrey, John P., Bartlesville
Trainor, William J., Tulsa
Turlington, M. M., Seminole
Walker, C. F., Grove
Warterfield, Floyd E., Holdenville
Wharton, J. L., Depew
White, J. Hutchings, Muskogee
Willour, Leonard S., McAlester
Wormington, F. L., Miami

History of O.S.M.A.

THE OFFICERS

President

Each physician elected by the House of Delegates as President of the Oklahoma State Medical Association has been a recognized leader in the profession. Each has proved to be an able spokesman for organized medicine in Oklahoma. Several presidents since the amalgamation were also leaders in the territorial associations.

The first president, 1906-07, B. F. Fortner, Vinita, pioneered in the organization of the Indian Territory Medical Association. He remained a stalwart supporter of organized medicine and lent his considerable prestige and energies to the amalgamation of the societies into one strong and unified force for the betterment of medicine in Oklahoma.

The precedent established in the election of such an outstanding representative of the profession as Doctor Fortner has not been violated in the succeeding fifty years. The committee of members of the two territorial associations which met in Tulsa prior to the amalgamation meeting formally agreed to elect the president alternately from the Indian and Oklahoma territory sections. This practice has been followed since with but one exception.

The President of the Association serves as the presiding officer of the general meetings of the organization and after 1926 at the meetings of the Council. Before the establishment of the Speakership in 1937, the President also presided over the meetings of the House of Delegates.

Following are the photographs and year of tenure of each president:



B. F. FORTNER
Vinita
1906-07



CHARLES S. BOBO
Norman
1907-08



V. J. VANCE
Checotah
1908-09



WALTER C. BRADFORD
Shawnee
1909-10



DAVID A. MYERS
Lawton
1910-11



CHARLES L. REEDER
Tulsa
1911-12



JAMES L. SHULER
Durant
1912-13



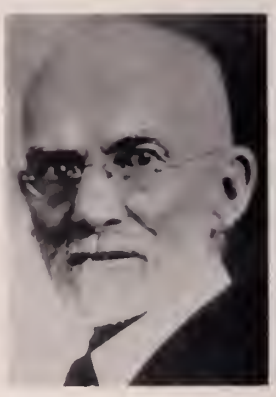
JAMES M. BYRUM
Shawnee
1913-14



JOHN W. RILEY
Oklahoma City
1914-15



J. HUTCHINGS WHITE
Muskogee
1915-16



CHARLES R. HUME
Anadarko
1916-17



W. ALBERT COOK
Tulsa
1917-18



LEONARD S. WILLOUR
McAlester
1918-19



LEWIS J. MOORMAN
Oklahoma City
1919-20



JOHN W. DUKE
Guthrie
May to October 1920



GEORGE A. BOYLE
Enid
October 1920 to May 1922



McLAIN ROGERS
Clinton
1922-23



RALPH V. SMITH
Tulsa
1923-24



EVERETT S. LAIN
Oklahoma City
1924-25



P. P. NESBITT
Tulsa
1925-26



ARTHUR S. RISSER
Blackwell
1926-27



JOSEPH S. FULTON
Atoka
1927-28



ELLIS LAMB
Clinton
1928-29



CLAUD T. HENDERSHOT
Tulsa
April to September 1929



EDMUND S. FERGUSON
Oklahoma City
September 1929 to May 1931



HENRY C. WEBER
Bartlesville
1931-32



ROBERT M. ANDERSON
Shawnee
1932-33



TRACEY H. McCARLEY
McAlester
1933-34



LeROY D. LONG
Oklahoma City
1934-35



LOUIS H. RITZHAUPT
Guthrie
1935-36



GEORGE R. OSBORN
Tulsa
1936-37



SAM A. McKEEL
Ada
1937-38



HENRY K. SPEED
Sayre
1938-39



WALTER A. HOWARD
Chelsea
1939-40



HENRY H. TURNER
Oklahoma City
1940-41



FINIS W. EWING
Muskogee
1941-42



JAMES D. OSBORN
Frederick
1942-43



JAMES STEVENSON
Tulsa
1943-44



C. R. ROUNTREE
Oklahoma City
1944-45



V. C. TISDAL
Elk City
1945-46



L. C. KUYRKENDALL
McAlester
1946-47



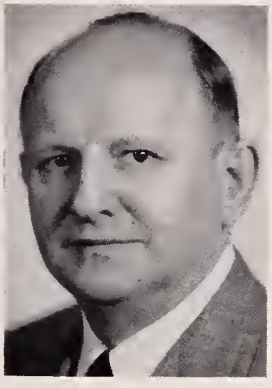
PAUL B. CHAMPLIN
Enid
1947-48



C. E. NORTHCUTT
Ponca City
1948-49



GEORGE H. GARRISON
Oklahoma City
1949-50



RALPH A. McGILL
Tulsa
1950-51



L. CHESTER McHENRY
Oklahoma City
1951-52



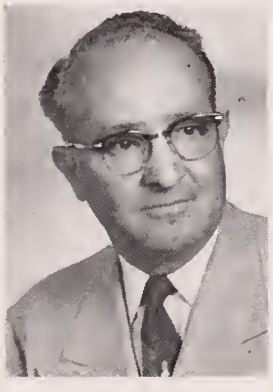
ALFRED R. SUGG
Ada
1952-53



JOHN E. McDONALD
Tulsa
1953-54



BRUCE R. HINSON
Enid
1954-55



R. Q. GOODWIN
Oklahoma City
1955-56



H. M. McCLURE
Chickasha
1956-57

President-Elect

The Council, in 1915, recognizing the magnitude of the position of President of the Association and the necessity for adequate preparation for carrying out the manifold duties of office, recommended to the House of Delegates that the office of President-Elect be established. The following year in due course such an amendment to the constitution was approved and W. Albert Cook, Tulsa, was elected President-Elect, to assume the duties of president one year after his selection.

Vice-President

Each of the territorial associations had elected three Vice-Presidents, providing an order of succession. From 1906 until 1927 the amalgamated association elected three Vice-Presidents. From 1928 until 1940 this office was absent from the organization. Since 1940 the constitution has provided one Vice-President who succeeds the President upon death or resignation.

There follows a chronological list of the physicians who have served the association as Vice-President over the past fifty years.

1906-07—First—M. A. Kelso, Enid
Second—Walter C. Bradford, Shawnee
Third—Floyd E. Warterfield, Holdenville

1907-08—First—Walter C. Bradford, Shawnee
Second—Floyd E. Warterfield, Holdenville
Third—T. S. Booth, Guthrie

1908-09—First—Floyd E. Warterfield, Holdenville
Second—Walter C. Bradford, Shawnee
Third—LeRoy D. Long, McAlester

1909-10—First—Charles L. Reeder, Tulsa
Second—David A. Myers, Lawton
Third—John W. Duke, Guthrie

1910-11—First—Charles L. Reeder, Tulsa
Second—H. M. Williams, Wellston
Third—James L. Shuler, Durant

1911-12—First—James L. Shuler, Durant
Second—John W. Duke, Guthrie
Third—H. M. Williams, Wellston

1912-13—First—J. A. Walker, Shawnee
Second—James M. Byrum, Shawnee
Third—A. B. Fair, Frederick

1913-14—First—J. T. Slover, Sulphur
Second—D. Long, Duncan
Third—J. Henry Barnes, Enid

1914-15—First—Charles R. Hume, Anadarko
Second—W. Albert Cook, Tulsa
Third—Edward F. Davis, Oklahoma City

1915-16—First—Walter Penquite, Chickasha
Second—L. T. Strother, Nowata
Third—W. Albert Cook, Tulsa

1916-17—First—G. Fowler Border, Mangum
Second—A. R. Lewis, Ryan
Third—Horace Reed, Oklahoma City

1917-18—First—McLain Rogers, Clinton
Second—G. Fowler Border, Mangum
Third—Horace Reed, Oklahoma City

1918-19—First—E. D. James, Miami
Second—H. M. Williams, Wellston
Third—Walter Hardy, Ardmore

1919-20—First—Jackson Brashears, Lawton
Second—G. Pinnell, Miami
Third—John A. Hatchett, El Reno

1920-21—First—J. L. Austin, Durant
Second—H. A. Lile, Cherokee
Third—T. T. Norris, Crowder

1921-22—First—J. A. Walker, Shawnee
Second—J. C. Best, Ardmore
Third—L. B. Torrance, Okmulgee

1922-23—First—Edmund S. Ferguson, Oklahoma City
Second—William A. Tolleson, Eufaula
Third—E. B. Dunlap, Lawton

1923-24—First—Charles H. Ball, Tulsa
Second—A. L. Blesh, Oklahoma City
Third—George S. Baxter, Shawnee

1924-25—First—George S. Baxter, Shawnee
Second—Joseph S. Fulton, Atoka
Third—W. H. Livermore, Chickasha

1925-26—First—S. E. Mitchell, Muskogee
Second—Joseph S. Fulton, Atoka
Third—Robert S. Love, Oklahoma City

1926-27—First—R. D. Long, Oklahoma City
Second—Fred S. Clinton, Tulsa
Third—Walter A. Howard, Chelsea

1927-28—First—W. T. Tilly, Muskogee
Second—Claud T. Hendershot, Tulsa
Third—Eugene O. Barker, Guthrie

1940-41—William A. Tolleson, Eufaula

1941-42—C. R. Rountree, Oklahoma City

1942-43—Calvin L. Johnson, Pauls Valley

1943-44—James G. Edwards, Okmulgee

1944-45—Frank W. Broadway, Ardmore

1945-46—Ralph McGill, Tulsa

1946-47—Roy E. Emanuel, Chickasha

1947-48—Shade D. Neely, Muskogee

1948-50—H. Violet Sturgeon, Hennessey

1950-51—Malcom E. Phelps, El Reno

1951-52—Allen G. Gibbs, Oklahoma City

1952-53—James S. Petty, Guthrie

1953-54—Ralph A. Smith, Oklahoma City

1954-55—Clifford M. Bassett, Cushing

1955-56—Malcom E. Phelps, El Reno

Secretary-Treasurer

The House of Delegates in 1906 elected Eugene O. Barker, Guthrie, the first Secretary-Treasurer of the amalgamated association. He served until May, 1909, when Claude A. Thompson, Muskogee, was elected to succeed him. Doctor Thompson served until 1933, the year of his death, and was succeeded by Leonard S. Willour, McAlester, who was elected by the Council to fulfill the

unexpired term. In 1935, Doctor Willour was re-elected and remained in office until 1941. Lewis J. Moorman, Oklahoma City, succeeded Doctor Willour and served until his death in August, 1954. W. W. Rucks, Jr., Oklahoma City, filled the unexpired portion of his term.

The Secretary-Treasurer was also charged with the responsibility of editing the *Journal* after its founding in 1908. The House of Delegates at the 1914 annual meeting amended the Constitution to formally combine the offices of Secretary-Treasurer and Editor and to make the term of office three years.

In 1939, the Council created an Editorial Board of three physicians responsible to the Council. At the time Doctor Willour, the Secretary-Treasurer, was made a member of the Editorial Board and Editor-in-Chief. He continued to serve as editor until 1942, a year after Doctor Moorman had become Secretary-Treasurer. Doctor Moorman then served as Editor-in-Chief from 1942 until 1954. Ben H. Nicholson, Oklahoma City, became Editor-in-Chief in 1954.



L. S. WILMOUR



CLAUDE THOMPSON



EUGENE O. BARKER



LEWIS J. MOORMAN



W. W. RUCKS



BEN H. NICHOLSON

Speaker of the House of Delegates

Until 1937, the House of Delegates was presided over by the President of the Association. In that year, the Constitution and By-Laws were amended to provide for a Speaker and Vice-Speaker. Both are elected for terms of two years. The Speaker presides at all meetings of the House when present, or in his absence, the Vice-Speaker or other person appointed by the Speaker presides. The Speaker appoints reference Committees and performs such other duties necessary to expedite the business of the House of Delegates. Following is the list of physicians who have served in these capacities. (vs) indicates the office of Vice-Speaker.

Gallaher, Clinton, Shawnee, 1951-
Garrison, George H., Oklahoma City, 1942-48
Haynie, W. Keiller, Durant (vs) 1950-
McHenry, L. Chester, Oklahoma City, 1948-50
Nesbitt, P. P., Tulsa, 1941-42; (vs) 1937-41
Osborn, James D., Frederick, 1937-41
Speed, Henry K., Sayre (vs) 1941-46
Sugg, Alfred R., Ada, 1950-51; (vs) 1946-50

Delegates to the American Medical Association

At the time of the amalgamation of the associations, the membership was sufficient for the Oklahoma State Medical Association to be allotted two seats in the House of Delegates of the American Medical Association. From 1909 until about 1926, the State Association was entitled to two delegates. Apparently, from 1927 until 1938, there were enough members for three representatives. In the latter year, a reapportionment from the national House of Delegates reduced Oklahoma's representation to the present two. Members of the Association who have

served as Delegates to the American Medical Association are:

Barnes, J. Henry, Enid (alternate) 1912-13
Bliekensderfer, Charles, Shawnee (alternate) 1910-11
Bobo, Charles S., Norman, 1909-10
Burleson, Ned, Prague (alternate) 1952-54
Burton, John F., Oklahoma City, 1949-; (alternate) 1947-49
Byrum, James M., Shawnee, 1922 and 1923
Clinton, Fred S., Tulsa, 1906
Cook, W. Albert, Tulsa, 1922-39
Cotton, W. W., Poteau (alternate) 1951-52
Edwards, James G., Okmulgee (alternate) 1938-39
Ewing, Finis W., Muskogee (alternate) 1942-51
Hahn, L. A., Guthrie, 1909-10
Hatchett, John A., El Reno, 1906
Howard, Walter A., Chelsea, 1942-44; (junior) 1940-41
Hume, Charles R., Anadarko, 1910-11, 1918 and 1919
Kelso, M. A., Enid, 1917 and 1918
Lain, Everett S., Oklahoma City, 1912 and 1913, 1927 and 1928; (alternate) 1910-11
Moorman, Lewis J., Oklahoma City, 1921 and 1922
Osborn, James D., Frederick (alternate) 1943-47
Penquite, Walter, Chickasha, 1915 and 1916
Phelps, Malcom E., El Reno (alternate) 1949-
Ramsey, G. W., McAlester, 1907 and 1908
Reed, Horace, Oklahoma City, 1929-39
Reeder, Charles L., Tulsa (alternate) 1909-10
Riley, John, Oklahoma City, 1916 and 1917
Risser, Arthur S., Blackwell, 1941-44
Rogers, McLain, Clinton, 1924-40
Rountree, C. R., Oklahoma City, 1945-49
Searle, Mauriee J., Tulsa (alternate) 1950-51
Shuller, Elbert H., McAlester (alternate) 1954-
Stevenson, James, Tulsa, 1944-48, 1950-55
Walker, J. A., Shawnee (alternate) 1909-10
White, J. Hutchings, Muskogee, 1913 and 1914
Willour, Leonard S., McAlester, 1920 and 1921
Wright, Walter E., Tulsa, 1910-15

History of O.S.M.A.

THE COUNCIL

The Oklahoma State Medical Association inherited from its parent societies the democratic organization of the American Medical Association. The governing body of the Association is a broadly based House of Delegates, chosen from the constitutent societies. This large group usually met only in annual session. To provide the necessary interim supervision of Association activities, the Council was created in the Constitution adopted in 1906. The Councilors, representing districts composed of a group of counties, are nominated by the Districts and elected by the House of Delegates.

The first Council of the new state association was composed of

LeRoy D. Long, McAlester, at large

Gregory A. Wall, Oklahoma City, District 1

A. L. Blesh, Guthrie, District 2

Everett S. Lain, Weatherford, District 3

Ney Neel, Mangum, District 4

J. Henry Barnes, Enid, District 5

F. M. Duckworth, Claremore, Northern District

B. J. Vance, Checotah, Western District

E. N. Wright, Olney, Central District

H. P. Wilson, Wynnewood, Southern District

The Council Districts in the Oklahoma Territory were composed of groups of counties. In the Indian Territory, where there were no county boundaries, four arbitrary geographical divisions were established as districts. The first Council redistricting was made necessary with the coming of Statehood to Oklahoma. In 1907, the Indian Territory side of the state was divided into counties. On November 19, three days after Oklahoma officially became the 46th state, the Council of the Oklahoma State Medical Association met in Oklahoma City and devised a plan of redistricting. The following alignment of counties resulted from this action which was approved by the House of Delegates in Annual Session in Sulphur, May 12, 1908.

District 1. Canadian, Oklahoma, Cleveland, Pottawatomie, Seminole, Lincoln, and Grady.

District 2. Grant, Kay, Osage, Noble, Pawnee, Kingfisher, Logan, and Payne.

District 3. Roger Mills, Custer, Dewey, Blaine, Beckham, Washita, and Caddo.

District 4. Greer, Kiowa, Jackson, Comanche, Tillman, Stephens, and Jefferson.

District 5. Cimarron, Texas, Beaver, Harper, Woodward, Alfalfa, Ellis, Woods, Major, and Garfield.

District 6. Washington, Nowata, Ottawa, Rogers, Mayes, Delaware, Tulsa, and Craig.

District 7. Creek, Wagoner, Cherokee, Adair, Okmulgee, Okfuskee, Muskogee, and McIntosh.

District 8. Sequoyah, LeFlore, Haskell, Hughes, Pittsburg, and Latimer.

District 9. McClain, Garvin, Carter, Love, Murray, Pontotoc, Johnston, and Marshall.

District 10. Coal, Atoka, Bryan, Pushmataha, Choctaw, and McCurtain.

By the time of the Annual Meeting in 1912, criticism of the arrangement of Councilor Districts had developed among some of the Councilors. They said that the apportionment was unequal. Some Councilors were over-burdened by having densely populated districts, while others had only a few physicians in their areas.

It was not until 1914, however, that the House of Delegates approved a redistricting. The number of districts was increased from ten to thirteen, to provide more Councilors and smaller districts.

District 1. Cimarron, Texas, Beaver, Harper, Ellis, Woodward, and Woods.

District 2. Roger Mills, Beckham, Dewey, Washita, Blaine, and Custer.

District 3. Greer, Harmon, Jackson, Kiowa, Comanche, Cotton, and Tillman.

District 4. Alfalfa, Grant, Garfield, Kay, Noble, and Major.

District 5. Kingfisher, Logan, Canadian, and Oklahoma.

District 6. Caddo, Grady, McClain, Garvin, Stephens, and Jefferson.

District 7. Tulsa, Osage, Pawnee, Creek, Okmulgee, and Okfuskee.

District 8. Payne, Lincoln, Pottawatomie, Cleveland, and Seminole.

District 9. Pontotoc, Coal, Johnston, Murray, Carter, Love, and Marshall.

District 10. Washington, Craig, Nowata, Ottawa, Delaware, Mayes, and Rogers.

District 11. Muskogee, Wagoner, Cherokee, Adair, Haskell, and McIntosh.

District 12. Hughes, Pittsburg, Latimer, LeFlore, and Sequoyah.

District 13. Bryan, Atoka, Pushmataha, McCurtain, and Choctaw.

Four years later, in 1918, perhaps because of a shift in population, the number of districts was reduced to eight. As approved by the House of Delegates, the counties of the state were redistricted as follows:

District 1. Texas, Beaver, Cimarron, Harper, Ellis, Woods, Woodward, Alfalfa, Major, Grant, Garfield, Noble and Kay.

District 2. Dewey, Roger Mills, Custer, Beckham, Washita, Greer, Kiowa, Harmon, Jackson, and Tillman.

District 3. Blaine, Kingfisher, Canadian, Logan, Payne, Lincoln, Oklahoma, Cleveland, Pottawatomie, Seminole, and McClain.

District 4. Caddo, Grady, Comanche, Cotton, Stephens, Jefferson, Garvin, Murray, Carter, and Love.

District 5. Pontotoc, Coal, Johnston, Atoka, Marshall, Bryan, Choctaw, Pushmataha, and McCurtain.

District 6. Okfuskee, Hughes, Pittsburg, Latimer, LeFlore, Haskell, and Sequoyah.

District 7. Pawnee, Osage, Washington, Tulsa, Creek, Nowata, and Rogers.

District 8. Craig, Ottawa, Delaware, Mayes, Wagoner, Cherokee, Adair, Okmulgee, Muskogee, and McIntosh.

If, in the resultant reduction in the number of Council seats, two or more holdover Councilors occurred in one district, lots were drawn. If in such a case, one of the Councilors was up for reelection, the election was not held, and the remaining holdover member was seated.

This 1918 plan lasted for ten years. Then in 1929 the number of districts was increased to ten:

District 1. Texas, Beaver, Cimarron, Harper, Ellis, Woods, Woodward, Alfalfa, Major, and Dewey.

District 2. Roger Mills, Beckham, Greer, Harmon, Washita, Kiowa, Custer, Jackson, and Tillman.

District 3. Grant, Kay, Garfield, Noble, Payne, and Pawnee.

District 4. Blaine, Kingfisher, Canadian, Logan, Oklahoma, and Cleveland.

District 5. Caddo, Comanche, Cotton, Grady, Love, Stephens, Jefferson, Carter, and Murray.

District 6. Osage, Creek, Washington, Nowata, Rogers, and Tulsa.

District 7. Lincoln, Pottawatomie, Okfuskee, Seminole, McClain, Garvin, and Pontotoc.

District 8. Craig, Ottawa, Mayes, Delaware, Wagoner, Adair, Cherokee, Sequoyah, Okmulgee, and Muskogee.

District 9. Hughes, Pittsburg, Haskell, Latimer, LeFlore, and McIntosh.

District 10. Johnston, Marshall, Coal, Atoka, Bryan, Choctaw, Pushmataha, and McCurtain.

Hughes County successfully petitioned the House of Delegates in 1934 to be moved from District 9 to District 7. The members of the Hughes County Society considered that to be a more logical relationship. Also, in 1941, Major County was transferred from District 1 to District 3. The reason given by the members was that the paved roads led to Enid in Garfield County, and not into the counties in District 1. Otherwise, the 1929 redistricting stood for twenty years.

By 1949 both Oklahoma City and Tulsa had become recognized as great medical centers with greatly expanded facilities. The increase in population in the respective counties had brought about an increase in the number of physicians practicing there. This factor dictated the creation of a separate Councilor District for each of these counties in the interest of more equitable representation. This resultant redistribution created fourteen districts:

District 1. Craig, Delaware, Mayes, Ottawa, Rogers, and Washington.

District 2. Kay, Noble, Osage, Pawnee, and Payne.

District 3. Garfield, Grant, Kingfisher, and Logan.

District 4. Alfalfa, Beaver, Cimarron, Ellis, Harper, Major, Texas, Woods, and Woodward.

District 5. Beckham, Blaine, Canadian, Custer, Dewey, and Roger Mills.

District 6. Oklahoma.

District 7. Cleveland, Creek, Lincoln, Okfuskee, Pottawatomie, and Seminole.

District 8. Tulsa.

District 9. Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah, and Wagoner.

District 10. Haskell, Hughes, Latimer, LeFlore, and Pittsburg.

District 11. Atoka, Bryan, Choctaw, Coal, McCurtain, and Pushmataha.

District 12. Carter, Garvin, Johnston, Love, Marshall, McClain, Murray, and Pontotoc.

District 13. Caddo, Comanche, Cotton, Grady, Stephens, and Jefferson.

District 14. Greer, Harmon, Jackson, Kiowa, Tillman and Washita.

The affairs of the Association, and the responsibilities of the Councilors of the Association, have become heavier during the past fifty years. A doubling of the membership of the Association, the involvement of the United States in two world wars and the resultant participation of the medical profession in these conflicts, the defense of the individual rights of Americans and the safeguarding of the time-honored private patient-physician relationship, and the constant struggle to improve medical education have made increasing demands upon the Councilor. He became a "Senator" of the Association. He more and more often was called upon to represent his "constituents", the physicians, in the counties comprising his district. Complete representation at meetings of the Council was essential. Recognizing this fact, the House of Delegates, in 1949, amended the Constitution and By-Laws to provide a Vice-Councilor for each district. The following year the first Vice-Councilors were elected. They serve in the absence of the Councilors and automatically succeed them in case of death or resignation until the next Annual Meeting.

At first, the Council elected its chairman and secretary from its membership. The Constitutional Revision in 1926 made the President of the Association the presiding officer of the Council. In addition, the President-Elect, Secretary-Treasurer, and Speaker of the House of Delegates were also designated members.

As the Executive Board of the Association, the Council carries out the mandates and policies of the Association which are determined by the House of Delegates. The Council controls and supervises the finances and expenditures of the Association. The Council has always been responsible for the investment of the Association's capital funds and property.

The Council always has met at the regular meetings of the Association, with other meetings as necessary. It now meets in Annual Meeting and holds regular quarterly sessions. At the time of the Annual Meeting the Council makes a detailed report to the House of Delegates.

As an early activity, the Councilors assisted in the organization of county societies. In sparsely settled regions of the state, multi-county societies were organized by the Council and frequently, the Councilor took an active part in its activities.

To avoid burdening the members with so much travel and interruption of practice for frequent meetings the Secretary was author-

ized in 1919, for the first time, to submit urgent matters to the Councilors by mail.

When the Council became aware of the importance of a continual and uninterrupted program throughout the year, it was instrumental in establishing the Executive-Secretaryship and a permanent home for the Association offices. The Secretary-Treasurer, a practicing physician, found it increasingly difficult to direct and record the work of the Council.

The first Executive Secretary, Mr. Richard H. Graham, was appointed in December, 1938. The following year, permanent headquarters were established in the Plaza Court Building in Oklahoma City.

Many of the leading physicians of the state have served the Association as Councilor. Following is an alphabetical list of Councilors since 1906, giving the physician's place of residence and years of tenure on the Council. Also included are the Vice-Councilors, indicated by (vc).

Adams, Felix M., Vinita, 1928-36
Aisenstadt, E. Albert, Picher, 1936-39
Allen, Victor K., Tulsa, 1950-52.
Ambrister, J. C., Chickasha, 1929-32
Anderson, P. S., Claremore (vc) 1948-49
Angus, Donald A., Lawton, 1941
Arrendell, Cad W., Ponca City, 1941-44
Athey, John V., Bartlesville, 1942-46
Austin, J. L., Durant, 1913-25

Baker, Alfred T., Durant, 1950-
Ball, C. H., Tulsa, 1920-23
Barnes, J. Henry, Enid, 1906-07, 1910-13
Bassett, Clifford M., Cushing, 1951-54
Blake, W. G., Tahlequah, 1909-11
Blesh, A. L. Guthrie, 1906-09, 1912-14
Bollinger, I. W., Henryetta (vc) 1952-55
Boyle, George A., Enid, 1916-20
Bradford, Walter C., Shawnee, 1922-28
Bungardt, A. H., Cordell, 1923-29
Burleson, Ned, Prague, 1949-52, (vc) 1947-49

Champlin, Paul C., Enid, 1929-35
Chase, A. B., Oklahoma City, 1932-36
Cherry, G. P., Mangum, 1915-18
Choice, R. W., Wakita (vc) 1947-49
Cotton, W. W., Atoka (vc) 1947-49
Cronk, Fred Y., Guthrie, 1914-19

Deputy, Ross, Clinton (vc) 1950-
Duckworth, F. M., Claremore, 1906-07
Duer, Joe L., Woodward, 1955-, (vc) 1953-55
Duke, John W., Guthrie, 1909-11

Elbright, E. D., Carmen, 1907-09
Edwards, James G., Okmulgee, 1945-48
Ensor, Daniel B., Hopeton, 1948-50
Etter, Forrest S., Bartlesville, 1949-
Ewing, Finis W., Muskogee, 1939-40, 1942-45

Fair, A. B., Frederick, 1909-12
Finch, J. William, Hobart, 1944-46
First, F. R., Jr., Checotah, 1952-55, (vc) 1949-52
Francis, J. W., Perry (vc) 1949-51
Fulton, Joseph S., Atoka, 1909-11, 1929-44

Gallaher, Clinton, Shawnee, 1942-48
Gallaher, Paul C., Shawnee, 1953-, (vc) 1952-53
Gallaher, William M., Shawnee, 1928-33
Gee, Lemuel E., Broken Bow (vc) 1949-51
Gibbs, Allen G., Oklahoma City (vc) 1952-54
Gill, W. T., Ada, 1955-, (vc) 1949-55
Goodwin, R. Q., Oklahoma City, 1949-54
Green, Charles E., Lawton (vc) 1955-

Hannas, R. R., Lawton (vc) 1954
Hardy, Walter, Ardmore, 1938-41
Haynie, John A., Durant, 1944-47
Haynie, W. Keiller, Durant, 1947-50
Heitzman, C. W., Muskogee, 1920-22
Hendershot, Claud T., Tulsa, 1926-29
Highland, J. E., Miami (vc) 1950-
Hinson, Bruce R., Enid, 1947-53
Hodgson, C. M., Kingfisher, 1948-49, 1953-, (vc) 1949-53
Hogg, O. J., Waurika, 1943-49
Hollingsworth, J. I., Waurika, 1941-45
Hollis, J. B., Mangum, 1954-, (vc) 1949-54
Hoover, Wilkie D., Tulsa, 1952-
Howard, Walter A., Chelsea, 1928-38
Hume, Charles R., Anadarko, 1909-14

James, Edward D., Haileyville, 1918
Johnson, A. L., El Reno, 1950-, (vc) 1949-50

Kernek, Paul, Holdenville, 1954-, (vc) 1950-54
Kirby, L. R., Cherokee, 1953-55, (vc) 1950-53
Kuyrkendall, L. C., McAlester, 1920-21, 1936-45

Lain, Everett S., Weatherford, 1906-09
Lamb, Ellis, Clinton, 1914-20
Larrabee, W. S., Tulsa (vc) 1949-50
Lile, H. A., Cherokee, 1929-31
Lively, Claude D., McAlester (vc) 1954-
Livermore, W. H., Chickasha, 1935-38
Livingston, L. Gordon, Cordell (vc) 1946-52
Long, D., Duncan, 1926-29, 1932-35
Long, LeRoy D., Oklahoma City, 1906-09, 1929-32
Lowrey, Tom, Oklahoma City, 1941-46

Maupin, C. M., Waurika, 1912-19
Mayberry, S. N., Enid, 1926-29
Mayfield, Warren T., Norman, 1952-53, (vc) 1949-52
McClure, H. M., Chickasha, 1950-, (vc) 1949-52
McDonald, Glen W., Pawhuska (vc) 1954-
McDonald, John E., Tulsa (vc) 1951-52
McGregor, Frank H., Mangum, 1929-35
McKenzie, Walton H., Enid, 1913-16
McNeil, Philip M., Oklahoma City, 1936-41
Miles, J. B., Anadarko, 1955-, (vc) 1950-55
Mitchell, E. B., Anadarko, 1908-09
Mitchell, L. A., Frederick, 1920-23, 1949-51
Mitchell, R. L., Vinita, 1914-18
Mohler, Eldon C., Ponca City, 1954-, (vc) 1951-54

Neel, Ney, Mangum, 1906-08
Neely, Shade D., Muskogee, 1940-42, 1948-52
Neilson, William P., Enid (vc) 1952-55
Nesbitt, P. P., Muskogee, 1911-18, 1922-25

Newman, O. C., Shattuck, 1950-53, (vc) 1947-50
Northcutt, Clarence E., Ponca City, 1944-46
Patterson, James L., Duncan, 1945-48, 1949-50
Phelps, Joe, El Reno, 1947-49
Pounders, Carroll M., Oklahoma City, 1946
Rawls, S. P., Altus, 1914-15
Rhea, Thomas E., Idabel (vc) 1951-
Ridgeway, Elmer Jr., Oklahoma City, 1954-
Risser, Arthur S., Blackwell, 1920-26, 1935-41
Robberson, Morton E., Wynnewood (vc) 1955-
Robertson, Ira W., Dustin, 1909-14
Rucker, Raymond W., Bartlesville (vc) 1947-48
Rucks, W. W. Jr., Oklahoma City (vc) 1949-52
Russell, Henry, Enid, (vc) 1955-
Russo, Peter E., Oklahoma City (vc) 1954-
Sayles, W. Jackson, Miami (vc) 1947-50
Searle, Maurice J., Tulsa, 1949-50
Showman, W. A., Tulsa (vc) 1952-54
Shuller, Elbert H., McAlester, 1947-54
Slover, J. T., Sulphur, 1914-26
Smith, Charles A., Norman (vc) 1953-
Smith, Ralph V., Oklahoma City, 1911-14
Smith, Wendell L., Tulsa (vc) 1954-
Speed, Henry K., Sayre, 1935-39
Standifer, O. C., Elk City, 1949-50, (vc) 1947-49
Stevenson, James, Tulsa, 1938-42
Stout, Marvin E., Oklahoma City, 1919-22
Strother, L. T., Nowata, 1911-14
Sutton, F. R., Bartlesville, 1908-11
Templin, Oscar E., Alva, 1931-48
Thompson, Claude A., Muskogee, 1908-09
Tilly, W. T., Muskogee, 1907-08
Tisdal, V. C., Elk City, 1939-44
Tolleson, William A., Eufaula, 1933-36
Traverse, C. A., Alva (vc) 1955-
Vance, B. J., Checotah, 1906-08
Veazey, J. Hobson, Ardmore, 1949-55, (vc) 1947-48
Walker, J. A., Shawnee, 1909-12, 1936-42
Wall, Gregory A., Tulsa, 1906-09, 1923-26
White, J. Hutchings, Muskogee, 1918-28
Williams, H. M., Wellston, 1914-19
Willour, Leonard S., McAlester, 1914-18, 1921-33
Wilson, H. P., Wynnewood, 1906-14
Woodson, Earl M., Poteau, 1945-50
Workman, J. M., Woodward, 1914-19
Wright, E. N., Olney, 1906-09
Wright, H. L., Hugo, 1911-13
Wright, Walter, Tulsa, 1906-07, 1914-18

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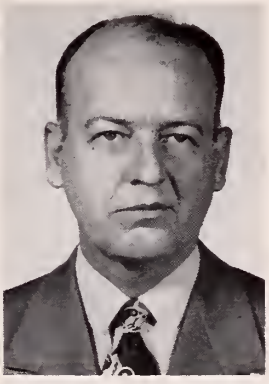
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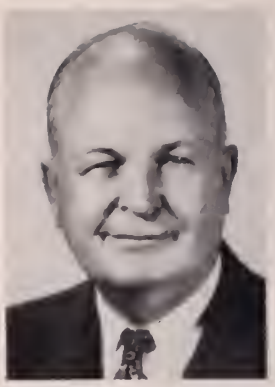
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Ada
District 12



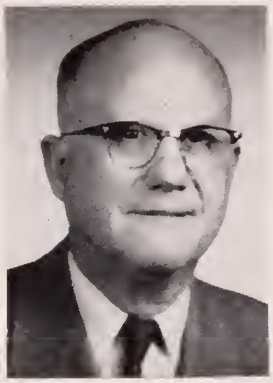
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Anadarko
District 13



CHAS. B. GREEN
Lawton
District 13



J. B. HOLLIS
Mangum
District 14



R. R. HANNAS
Sentinel
District 14

Pictures were not available of Wendell Smith, Tulsa; Paul Gallaher, Shawnee; and T. E. Rhea, Idabel.

History of O.S.M.A.

The Second World War

In July, 1940, as a part of the national defense effort, the Council of the Association established the Committee on Medical Preparedness. The purpose of this committee was to correlate the efforts of the County Societies in securing a 100 per cent return of the A.M.A. Medical Preparedness Questionnaire and to act in any other capacity that might be related to the Association and National Defense.

This committee and the equivalent committees of the county societies acted as the liaison agencies between the membership and the Office of Procurement and Assignment for the medical, dental, veterinary and other allied professions following the establishment of this office by the President of the United States in 1941.

The State Committee was composed of a chairman, vice-chairman, and a representative from each Councilor District. The first Chairman was Henry H. Turner, Oklahoma City. The Vice-Chairman was L. S. Willour, McAlester. The Councilor District Representatives were:

District 1. John L. Day, Supply
District 2. J. M. Bonham, Hobart
District 3. J. M. Watson, Enid
District 4. Tom Lowry, Oklahoma City
District 5. J. L. Patterson, Duncan
District 6. W. Albert Cook, Tulsa
District 7. Robert M. Anderson, Shawnee
District 8. F. L. Wormington, Miami
District 9. J. M. Harris, Wilburton
District 10. John A. Haynie, Durant

Serving as advisory members of the Committee were Robert U. Patterson, Dean of the University Medical School; Grady F. Mathews, State Health Officer; and Louis H. Ritzhaupt, State Medical Officer of Selective Service.

The primary objective of the State Procurement and Assignment Service which was established by the National Procurement and Assignment Office was to maintain a complete list of all physicians, dentists and veterinarians in the entire country with detailed information as to the age, physical condition, professional qualifications and availability for service in the armed forces and in essential civil industrial areas. However this determination was never needed. All of this information was tabulated on punch cards for immediate reference. The government agencies utilizing the services of

these three professions made requisitions upon the Service.

In February, 1942, the name of the Medical Preparedness Committee was changed at the request of the Washington, D.C., Office of Procurement and Assignment to the State Committee on Procurement and Assignment. The names of the county committees were not changed.

The State Committee on Procurement and Assignments periodically, through the county chairman surveyed the civilian medical needs of the state. Each county chairman was asked to determine the minimum number of physicians necessary in his county to maintain adequate protection of the health of the civilian population. The results of the survey were studied and from it a list was drawn-up indicating the names of the physicians who were available for military or other vital service. The local physicians were at all times the arbiters of the local needs.

All State Medical Association Procurement and Assignment chairmen west of the Mississippi River met with War Department, Selective Service, and Procurement and Assignment officials in Omaha, May 8, 1942. Dr. H. H. Turner, Oklahoma Chairman, and Dick Graham represented the Oklahoma Association. At the meeting the federal officials announced the creation of recruiting boards for physicians, dentists, and veterinarians. It was hoped to simplify induction of physicians into the armed services. Also, it was designed to provide more perfect liaison with Selective Service, especially as related to physicians under 46.

The Oklahoma Recruiting Board was established in the Plaza Court Building in Oklahoma City. Director of the Board, representing the Surgeon General, was Colonel Lee R. Wilhite, M.C. of Perkins. Captain Oliver H. Cornelius was appointed to represent the Adjutant General. The Recruiting Board had full authority to order physical examinations, waive physical defects, grant commissions and administer the oath of office. In the Fall of 1942, the Oklahoma Board was discontinued because Oklahoma physicians had met their quota and recruiting was no longer necessary in Oklahoma.

About the middle of 1942, the Procurement and Assignment Service was transferred to the direct supervision of the War Manpower Commission, headed by Paul V. McNutt.

Dick Graham, Executive Secretary of the State Association, was loaned to the War Manpower Commission as Assistant to Lieutenant Commander Max Lapham, Assistant Executive Director of the Procurement and Assignment Service. He served until October 1, 1945, when he returned to the O.S.M.A. office.

Dr. Henry H. Turner, Oklahoma City, resigned as chairman of the State Committee on Procurement and Assignment in 1942. Appointed by the Council to replace him was W. W. Rucks, Sr., Oklahoma City. The Chairman of the Directing Board of the National Committee had recommended that the vice-chairman of the state committee be a resident in the same city as the chairman. In line with this recommendation, C. R. Rountree, Oklahoma City, was selected to replace L. S. Willour, McAlester, vice-chairman under Turner. Dr. R. M. Anderson, Shawnee, had died this year and the Council selected W. M. Gallaher, Shawnee, as Councilor Chairman for District 7.

The *Journal* of the Association regretfully announced in the January, 1943 issue, that Captain James C. Smith, Ardmore, was the first member of the Association to be killed in action. He was killed in September, 1942 somewhere in New Guinea in a bombing raid.

By September 1, 1942, Oklahoma had surpassed its quota for physicians. The Procurement and Assignment Committee reported that the filled quota stood at 121 per cent. Oklahoma's 1943 quota was proportionately reduced.

The Editorial Board of the *Journal* established the "Fightin' Talk" column in the May, 1943 issue. The column was designed to give news of the individual members of the Association in the armed forces.

Three other members of the Association were reported killed in action in 1944. They were Bernard Bullock, Clinton, Frank M. King, Woodward, and Roy E. Baze, Chickasha.

The Committee on Procurement and Assignment was terminated at the end of the Second World War. At the beginning of the Korean conflict, a National Committee for Physicians, Dentists and Veterinarians was established. The Chairman for Oklahoma was F. Redding Hood and the following were appointed by the Council as members:

District 1	W. C. Chestnut, M.D., Miami
District 2	Lee R. Wilhite, M.D., Perkins
District 3	F. C. Lattimore, M.D., Kingfisher
District 4	Joe L. Duer, M.D., Woodward
District 5	W. F. Bohlman, M.D., Watonga
District 6	Milam McKinney, M.D., Okla. City
District 7	A. N. Deaton, M.D., Wewoka
District 8	W. D. Hoover, M.D., Tulsa S. C. Shepard, M.D., Tulsa
District 9	Shade D. Neely, M.D., Muskogee
District 10	C. M. Bloss, M.D., Holdenville J. F. Park, M.D., McAlester
District 11	A. T. Baker, M.D., Durant
District 12	Ray Lindsay, M.D., Pauls Valley
District 13	R. R. Coates, M.D., Chickasha
District 14	Roy Fisher, M.D., Frederick J. B. Hollis, M.D., Mangum

The recruitment and procurement of physicians has always been the responsiblity of the medical associations in cooperation with the federal government. The expense of these activities has been borne in large measure by the Associations, since the appropriations by the Congress were inadequate. It is a tribute to the Oklahoma State Medical Association that its members have readily responded to the Nation's call. Every quota has been met fully.

History of O.S.M.A.

Oklahoma's Medical Archives

Materials reflecting the progress of medicine in Oklahoma during the past century have been assembled at the University of Oklahoma in a special collection known as the "Oklahoma Medical Archives."

The collecting of these original source materials on medicine in Oklahoma is based upon a simple premise—a recognition that Oklahoma's history is unique and that medicine has been an integral part in the development of Oklahoma. Only a few years ago, many of the Indian peoples living in Oklahoma still retained vestiges of their recent Stone Age past. Many doctors living in Oklahoma today are treating sons and daughters of people who were once subject to the tribal medicine man. Other Oklahomans are only a generation removed from the primitive period of territorial medicine. Nearly every adult today can remember the time when a patient's trip to the hospital was so long delayed that it was often followed soon after by the final journey to the cemetery. Times have, indeed, changed rapidly. Much of the total history of man has b e e n telescoped within that period beginning with the permanent settlement of Oklahoma only a little more than a century ago. Medicine in Oklahoma reflects much of that change.

Origin of the Oklahoma Medical Archives

A number of men who have devoted their lives to the practice of medicine in the State saw reasons why the original source materials of medical history in Oklahoma should be collected and preserved. They saw also that many of these materials were being lost forever. These devoted doctors foresaw the future uses that would be made of these materials in the writing of medical history, in the celebration of anniversaries, in marking

the passing of our pioneer doctors. Among those who should be given credit for the germ of the Oklahoma Medical Archives are Dr. Tracey H. McCarley of McAlester; Dr. Ralph McGill of Tulsa and the late Dr. Lewis J. Moorman of Oklahoma City—to name only three. These men, and many others within the Oklahoma State Medical Association, were responsible for the creation of fellowships and for the allocation of funds for these fellowships. Recipients of these awards, who served as field representatives of the Division of Manuscripts at the University of Oklahoma, made a canvass of the State which resulted in the interviewing of many pioneer physicians, colleagues, families and friends. As a result, more than 100 individual collections of medical archives have been collected, which form the nucleus of the "Oklahoma Medical Archives." Subsequently, the Oklahoma State Medical Assistants Society made it possible for the oral reminiscences of a number of veteran physicians to be recorded in their own words on tape.

Nature of the Medical Archives

The collections of medical archives now available for research at the University's Division of Manuscripts include a variety of materials. These include Awards, Citations, Diplomas, Autobiographical statements and Biographical sketches; Diaries, Journals, and Correspondence; Minute books; Fee books and ledgers; Scrapbooks; Publications—bulletins, programs. Confidential case records, for the most part, have not been included.

Other items collected and preserved for research and for public display include early-day medical books, instruments, saddle pockets, pill cases, and items having an interest because of their association. The tapes collected in the Oral History project are preserved in the original, as well as in typescript.

Categories of Material

For convenience of reference, the Medical archives may be subdivided into the following five categories: (1) Records of Individual Oklahoma Physicians; (2) Records of Organized Medicine; (3) Records of Hospitals and Clinics; (4) Pharmacy; (5) Oral History.

Under each heading are listed the various collections appropriate to that category. Each collection within a category is kept apart, intact, and separate from all other collections comprising that same classification. Each collection is identified with the following information: (1) *Official name*, given in reverse order for quick reference; (2) *Inclusive Dates* of the material comprising that collection, which may not necessarily reflect the comprehensive period of the physician's practice or of the existence of the association; (3) *Volume* or bulk of the collection, given in terms of the number of document containers (approximately 3 linear inches in thickness), ledger volumes, reels of tape, or other unit.

Records of Individual Oklahoma Physicians

This category comprises the records of the following doctors:

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SMITH (J. G.) Collection. 1895-1953. 1 doc. case.
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TAYLOR (Guy W.) Collection. 1893-1940. 12 doc. cases.
TOLLESON (W. A.) Collection. 1875-1953. 47 doc. cases.
TULLIS (Richard H.) Collection. 1905. 1 envelope.

VAN CLEAVE (W. E.) Collection. 1914-1948. 1 envelope.

WALKER (H.) Collection. 1903-1950. 1 envelope.
WALKER (John Riley) Collection. 1904-1914. 1 vol.; 1 envelope.
WALLACE (J. E.) Collection. 1955. 1 envelope.
WATSON (J. M.) Collection. 1873-1947. 1 envelope.
WEAR (J. B.) Collection. 1885-1932. 1 vol.; 1 envelope.
WEBER (S. G.) Collection. 1931-1937. 3 vols.; 1 envelope.
WHITE (H. H.) Collection. 1935. 1 envelope.
WILEY (A. Ray) Collection. 1908-1912. 1 envelope.
WILLIAMS (T. S.) Collection. 1900. 1 envelope.
WILSON (McClellan) Collection. 1903-1915. 1 envelope.
WOLFE (Reed) Collection. 1918-1948. 1 doc. case.
WOLFF (L. G.) Collection. 1900-1949. 1 envelope.
WRIGHT (R. L.) Collection. 1930-1942. 1 envelope.

YOUNG (James H.) Collection. 1953. 1 envelope.

Records of Organized Medicine

This category comprises the papers of the following associations and societies:

CADDO COUNTY MEDICAL SOCIETY Collection. 1904-1951. 1 envelope.
CHOCTAW COUNTY MEDICAL SOCIETY Collection. 1920. 1 vol.

GUTHRIE DISTRICT MEDICAL ASSOCIATION Collection. 1900-1940. 1 vol.

HASKELL AND LeFLORE COUNTY MEDICAL SOCIETY Collection. 1936-1951. 1 doc. case.

INDIAN TERRITORY MEDICAL ASSOCIATION Collection. 1881-1903. 2 vols.

LINCOLN COUNTY MEDICAL ASSOCIATION Collection. 1904-1939. 2 vols.

McINTOSH COUNTY MEDICAL SOCIETY Collection. 1906-1948. 2 envelopes.

OKMULGEE-OKFUSKEE COUNTY MEDICAL SOCIETY Collection. 1940-1947. 1 doc. case.

PITTSBURGH COUNTY MEDICAL ASSOCIATION Collection. 1917-1937. 1 vol.

ROGERS COUNTY MEDICAL SOCIETY Collection. 1915-1953. 4 doc. cases.

Records of Hospitals and Clinics

This category includes the archives of the following institutions:

EL RENO SANITARIUM Collection. 1902-1940. 1 doc. case.

LOY-McDONALD CLINIC Collection. 1946-1948. 3 doc. cases.

McALESTER, ALBERT PIKE HOSPITAL Collection. 1917-1948. 27 vols.; 2 doc. cases.

Pharmacy

This category includes the following units of records:

BARBOUR (John and Robert) Collection. 1898-1950. 53 doc. cases; 174 vols.

JORDAN DRUGSTORE Collection. 1921-1928. 5 envelopes.

LILLIE (F. B.) Collection. 1872-1949. 7 doc. cases; 13 vols.

Oral History

Included in this category are collections of sensitized tape on which have been recorded the reminiscences of the following pioneer physicians:

ATHEY (J. V.), Bartlesville
BAKER (Roscoe C.), Enid
BASINGER (W. I.), Oklahoma City
COOK (Albert W.), Tulsa

COULTER (T. B.), Tulsa
EWING (Finis), Muskogee
HARRIS (Bunn), Tulsa
HIRSHFIELD (A. C.), Oklahoma City
HOWELL (O. E.), Norman
KUYRKENDALL (L. C.),McAlester
LAMBERT (J. B.) Lexington
LAIN (Everett S.), Oklahoma City
LYNCH (Thomas J.), Tulsa
McCARLEY (T. H.), McAlester
McKEEL (Sam), Ada
MURDOCK (H. D.), Tulsa
NESBITT (P. P.) Tulsa
RUCKS (W. W.), Oklahoma City
SHIPMAN (M. H.), Bartlesville
SOMERVILLE (O. S.), Bartlesville
SMITH (Joseph G.), Bartlesville
TAYLOR (W. M.), Oklahoma City
WILLOUR (L. S.) McAlester

Use of the Medical Archival Collections

These materials were collected for the use of the medical profession in the State—the various county and district societies and the State association, as well as individual doctors who may wish to engage in historical research. The University is also engaged in the training of young men and women in the careers of medicine and surgery, public health, pharmacy, medical journalism, bacteriology, social work, and other fields related to medicine. These students will be users of these materials in the future, as they have already been.

Research into the history of medicine in Oklahoma and the work of individual doctors, on the part of students at the University, received a great stimulus with the establishment in 1955 of the permanent Moorman Award in Oklahoma Medical History. This award, made possible at the time of Doctor Moorman's death by his many friends, highlights competence in the use of these archival source materials.

The collections may be used for research under terms of accessibility that are unusually liberal. Common sense measures are adopted to help insure the preservation of the materials themselves, as well as to protect the individual's right to privacy.

All users of these materials are given every professional assistance. An initial conference with the Archivist in the past has often proved helpful in indicating material available on a given topic, as well as in the extension or delimiting of a contemplated research topic.

Leads to Similar Materials

Many persons will be in a singularly fortunate position, because of long-standing friendships and other connections, to assist in the rescue of other archival materials and the transfer of them to the Oklahoma Medical Archives. Similar materials still in private hands, for which a place should be made in this history of medicine collection, should be called to the attention of the Archivist of the University. Such information may be directed to Division of Manuscripts, University of Oklahoma, Norman. Telephone: JEfferson 4-6900, Extension 534.

PRESIDENT'S LETTER



The Fiftieth Anniversary of the founding of the Oklahoma State Medical Association occurred on May 6 of this year. This same month also brought about my inauguration as President of your Association.

Upon becoming President and trying to take a perspective of both the past and future, certain things have come prominently to my attention.

I cannot help but look back upon my predecessors who, in my opinion, had general characteristics quite similar. They were fine scholarly gentlemen possessing qualities of courtesy, kindness, consideration and usable knowledge, all of which make for outstanding physicians.

I also would point out for the future the contributions to come to the health of mankind in the use of Atomic Energy in medicine as shown by the program in this field which was sponsored by the Oklahoma County Medical Society during the Southwest American Exposition. This was a look into the future of scientific medicine and great credit should be given to the officers and the committees of the Oklahoma County Medical Society and all other persons who made this meeting possible. Had all of you had the same opportunity to have observed, as I did, the great curiosity and fervent hope exhibited by the thousands of everyday citizens for improvement in the field of diagnosis and treatment for many ills from this new development, you would have seen the responsibility of the medical profession for the future.

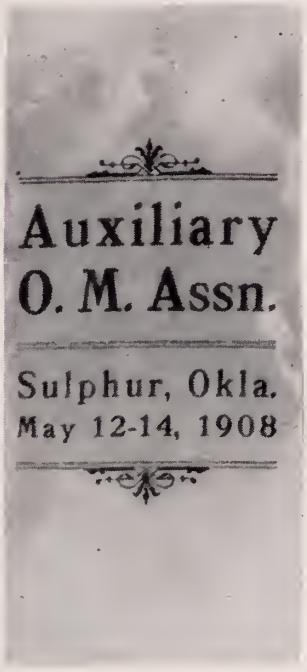
While there is a wide vista before us in scientific medicine, we still continue to have some of the same irritating and embarrassing situations with which to cope in the art of medicine; Why! Because a few M.D.'s of this State will not practice medicine within even shooting distance of the Code of Ethics or the Hippocratic Oath by which they bound themselves.

I rather doubt that anyone would take issue with these observations but I am wondering how many would offer solutions. How well the profession succeeds in working out solutions to these problems will in a great measure be determined by your guidance an assistance. I will make a sedulous effort to continue the excellent work by illustrious predecessors have so ably patterned for me. I will ask for and hope to receive HELP from you, the members of the Oklahoma State Medical Association.

Tom McClure M.D.

President

THE AUXILIARY



Reproduction of the badge used at the Second Annual Meeting of the Auxiliary.

The functions of the Woman's Auxiliary to the Oklahoma State Medical Association were nicely summarized in 1936 by President Louis H. Ritzhaupt, M.D., Guthrie, in this manner. These are (1) to promote friendship, to encourage an increased attendance at association meetings and to aid in the entertainment; (2) to give community service especially in relation to things medical; (3) to help educate the public in medical and health laws and to participate in the promotion of adequate legislation; (4) to work for public edification through membership in civic and private groups and by accepting positions of leadership in these, and (5) to study various phases of medicine, hygiene, medical laws and administration, both public and private—for self education.

The earliest attempts to fulfill these ideals began in April of 1907 in Shawnee. Wives of the Pottawatomie County physicians gathered in the home of Mrs. Walter C. Bradford to formulate plans for aiding their husbands, the hosts, at the forthcoming annual meeting of the newly amalgamated Oklahoma State Medical Association.

The results of this meeting and another one week later in the home of Mrs. J. E. Hughes, when the constitution and by-laws were adopted, was the formation of the Woman's Auxiliary to the Pottawatomie County Medical Society, with Mrs. Bradford as its first president. Other officers were

Mrs. A. N. Willey, first vice-president; Mrs. J. H. Scott, second vice-president; and Mrs. J. B. Ellis, secretary-treasurer. Mesdames Bradford, Cannon, Carter, Ellis, Farrington, Grayson, Henderson, Hughes, Mitchell, McGee, Rice, Rowland, Sanders, Sanborn, Shives, Trigg, Willey and Wilson were the charter members. The object of the new organization, according to its constitution, was "To promote friendly relations among the physicians' wives of Pottawatomie County and to foster the interests of the Medical profession." This intent has never varied for this society or the many others which came years later and has been carried over into the state code.

Enthusiastic approval accompanied the replies to the invitations issued by the Shawnee group to physicians' wives across the state to meet May 15, 1907, during their husbands' state meeting, to perfect a state auxiliary. The forthcoming organization is recognized by the American Medical Association Auxiliary, in the area of its jurisdiction, as the first woman's auxiliary to a state medical association.

Mrs. Walter C. Bradford, Shawnee, served as the first state president with Mrs. Arthur White, Oklahoma City, as first vice-president, Mrs. W. B. Pigg, McAlester, as second vice-president and Mrs. Floyd E. Warterfield, Holdenville, as secretary-treasurer. Plans were made for the new auxiliary to meet annually, co-jointly with the state organization and recommended the organization of more county societies.

After eight years this auxiliary ceased to function and did not resume until the reorganization meeting in 1926.

After being a guest of the Woman's Auxiliary of the Texas State Medical Association, Mrs. Edward P. Allen, Oklahoma City, was asked by Everett S. Lain, M.D., Oklahoma City, Oklahoma president and Mrs. S. C. Red, Houston, Texas, president of the Southern Medical Association Auxiliary to serve as official organizer for Oklahoma. At the annual meeting June 6, 1950, Mrs. Allen in her "Resume of Twenty-five Years of the Auxiliary" told of this project and its results.

"In the spring of 1925 I invited the wives of doctors from the staff of every Hospital in Oklahoma City to meet in my home (230 N. W. 16th) to discuss the advisability of organizing and every one present was very much interested and enthusiastic over the idea of an auxiliary and its was decided to organize at once and get started with our work.

"The Woman's Auxiliary to the Oklahoma County Medical Association was organized May 6, 1925, with a membership of forty-five. The officers elected were as follows: President, Mrs. Edward P. Allen; first vice-president, Mrs. Thomas H. Flesher; second vice-president, Mrs. James E. Harbison; recording secretary, Mrs. S. E. Frierson; corresponding secretary, Mrs. Earl D. McBride; treasurer, Mrs. Basil A. Hayes; parliamentarian, Mrs. A. M. Young, Sr.; printing committee, Mrs. Hayes and Mrs. Theo Wails. Time of meeting—fourth Wednesday morning of each month at 10 o'clock from October to May. Dues $3.00. Place of meeting —University Club Room, Skirvin Hotel. Roberts Rules of Order governed our business sessions."

As early as 1909, Doctor and Mrs. Charles B. Bradford of Oklahoma City had invited the Oklahoma County ladies to meet in their home for the purpose of organizing. This group was of short duration but pointed up the need for an auxiliary.

The auxiliaries of Pottawatomie and Oklahoma Counties are the oldest, continuously organized societies.

On Wednesday morning, June 23, 1926, in Oklahoma City the state auxiliary reorganization was perfected. The new constitution read as follows:

Article I. The name of this organization shall be the Woman's Medical Auxiliary of Oklahoma.

Article II. The object shall be social purposes, during the State Convention, and for promoting the interest of the profession, ethically and scientifically among the wives, mothers, widows and sisters of members of the State Medical Society.

Article III. The members shall be as in Article II.

Article IV. Officers to serve one year, from time of election, are President, President Elect, First Vice-President, Secretary and Treasurer.

Article V. Each past-president shall be-

come by election, a member of the Advisory Board until six presidents are members of the Board. After that two presidents (past) will be selected from each two years term.

The By-Laws read as follows:

Article I. Meetings are held annually, wherever the State Medical convenes.

Article II. The elected officers constitute the Executive Board; the Past Presidents, the Advisory Board are part of Executive Board when called by the President.

Article III. Executive Board will meet on the morning preceding the opening of the annual meeting and on call of the President or three members of Executive Board.

Article IV. Dues for the State Medical Auxiliary, from each county auxiliary are on the per capita basis; each county to name their own dues to cover fifty cents paid, per capita to the State Treasurer, twenty-five cents of this per capita goes to the National Treasurer, before March 15th of each year, and the other twenty-five cents per capita to the State Treasurer.

Article V. Chairman of Standing Committees shall be named by the President after approval of her Executive Board. Program, Finance, Membership, Publicity and *Hygeia* are necessary committees. Counties will make application to State President, enclosing dues, before delegates are seated. This should be done and receipts given by April 1st of each year.

Article VI. Two delegates from each county or two alternates, with the state Executive Board, and Advisory Board, constitute the voting body of the State Woman's Medical Auxiliary.

Article VII. Delegates to the National Medical Auxiliary which convenes where the American Medical Society meets, are the President of the State, or alternate, and two from each county that have receipts for dues by April first of each year.

Mrs. Allen's notebook of the 1926 meeting lists those attending as Mesdames Walter C. Bradford, James M. Byrum, J. S. Scott and T. C. Sanders, all of Shawnee; Mesdames Fenton M. Sanger, Edward P. Allen, Thomas K. Flesher, James E. Harbison, S. E. Frierson, Earl D. McBride, Willis K. West, Basil A. Hayes, A. M. Young, Sr., Theo Wails, M. M. Rowland, Everett S. Lain, Edmund S. Ferguson, L. M. Westfall, Lea A. Riely, A. L. Blesh, J. B. Eskridge, Jr., J. F. Messenbaugh, W. W. Rucks, Sr., Onis Hazel and Ernest Sullivan, all of Oklahoma City; Mrs. George W. West of Eufaula, Mrs. L. A. Turley of Norman, Mrs. Frank Bailey of Sulphur, Mrs. Joseph S. Fulton of Atoka, Mrs. Claud T. Hendershot of Tulsa, Mrs. Arthur S. Risser of Blackwell and Mrs. Claude A. Thompson of Muskogee.

Questions concerning Oklahoma and the "first" auxiliary arose in 1922 at the time of the organization of the American Medical Association Auxiliary. The *Weekly Bulletin* of the St. Louis Medical Society for November 30, 1922, published a resume of auxiliary founding in an article "Shall the St. Louis Medical Society Approve the Organization of a Women's Auxiliary?" which said "The women's auxiliary movement started in Houston, Texas (Harris County Medical Society) in 1918 largely through the initiative of Mrs. S. C. Red." Dr. Joseph M. Trigg, former Shawnee resident then residing in St. Louis, wrote on December 1, 1922, to the Pottawatomie County wives saying he remembered their group had had an earlier begining and asked for supporting information. Mrs. James M. Byrum, Shawnee, secretary for the society sent a reply December 6, 1922, substantiating Doctor Trigg's beliefs. He replied on December 23 that the minutes of the St. Louis Society would be corrected and suggested that the Pottawatomie Society "get fussy" with the American Medical Association to have credit properly placed.

On October 10, 1932, Mrs. Byrum, whose devotion and persistance finally gained victory, signed before a Notary Public the document she wrote, "History of the First Auxiliary to a Medical Association," which set forth the correct information concerning the organization of the Pottawatomie Society and the State Auxiliary.

Really organized efforts to have Oklahoma recognized as "first" began after the American Medical Association Auxiliary published *The First Twelve Years* in 1934 in which Minnesota was recognized as the "first." Mrs. George H. Garrison, Oklahoma City, attending the national meeting, in a letter of June 14, 1934, to Mrs. Byrum told of presenting a copy of the document and being refused any "claims to the honor without presenting authentic credentials to the historical

committee, such as the record of the first meeting, the Constitution as written then and other such authentic and certified materials."

On October 21, 1941, Mrs. F. C. Nilsson, president of the South Dakota Auxiliary sent circular letters to Oklahoma members seeking information in hopes of settling the claim since her state was also attempting to prove the "first." On October 28, 1941, Mrs. Byrum sent a photographic copy of Mrs. Walter C. Bradford's convention badge of 1908 (see illus.), a 1910 convention program and a copy of the history document signed by four charter members before a Notary Public.

The question had an answer. A copy of the document by Mrs. Byrum now hangs in the American Medical Association's Chicago headquarters and the National History committee has a photographic copy. The Oklahoma State Auxiliary and the Pottawatomie County Society have their "firsts." An interesting note to this controversy is that in the "Oklahoma News" found in the American Medical Association *Journal* for 1911 are the names of Auxiliary officers for that year and another entry in 1916 mentions that the Auxiliary met at the annual meeting.

At the instigation of Mrs. William R. Cheatwood and during the presidency of Mrs. Eldon C. Mohler, Ponca City, the first Woman's Auxiliary to the Student's American Medical Association was organized September 22, 1955, under the sponsorship of the Oklahoma State Auxiliary and the Oklahoma County Auxiliary. Mrs. James Bell and Mrs. J. R. Huggins of Oklahoma City assisted the young women in the organization and program planning for the group. Meetings have been held during the 1955-56 year. The purpose of the organization is to educate and acquaint the wives of the medical students with the medical profession and its various organizations, the aims, ideals and purposes, and to prepare them for their position and responsibility as a doctor's wife in the community. This is another "first" for Oklahoma since this is the first group of its kind in the United States.

Since membership in the State Auxiliary is membership in a component county or district society, the development of these component groups has been the growth of the state group. Tulsa County Society, organized in 1931, voted to affiliate with the state group on May 19, 1931, but was not actually admitted until January 1932. Cleveland County organized on March 22, 1933. Participation of its members as clerks and nurses at the Cleveland County Free Clinic each month was an important provision in their program. In 1933-34 societies from Canadian, Cleveland, Oklahoma, Pottawatomie, Tulsa and Woodward counties sent delegates to the annual meeting. Garfield auxiliary was organized October 14, 1935, with twenty-two members, at a meeting in the Oxford Hotel with Mrs. C. R. Rountree, Oklahoma City, chairman of the state organization committee, presiding. On April 2, 1936, the Pittsburg County Society organized and at the May, 1937, Tulsa convention received the silver tray for outstanding county auxiliary work. From 1937-38, active societies were found in these counties, Cleveland, Garfield, Pittsburg, Pottawatomie, Oklahoma, Tulsa and Woodward. Also on this active list were Pontotoc County which organized June 2, 1937, and Muskogee County which organized February 7, 1938. LeFlore society organized in 1939. In 1945, nine counties were still active. 1948 and the following year were memorable years for the organization committee. Under the outstanding leadership of Mrs. Joseph W. Kelso, Oklahoma City, aided by either Mrs. Neil Woodward, Oklahoma City, Mrs. Ray M. Balyeat, Oklahoma City, Mrs. Clinton Gallaher, Shawnee, or Mrs. Warren T. Mayfield, Norman, the following societies were organized:

Stephens—March 23, 1948, Mrs. Everett G. King, Duncan, president
Muskogee - Sequoyah - Wagoner — March 24, 1948, Mrs. Port Johnson, president
Canadian—Mrs. C. Riley Strong, El Reno, president
Kay-Noble—January 8, 1948, Mrs. C. E. Northcutt, Ponca City, president
Creek—Mrs. James F. Curry, Sapulpa, president
Garvin—Mrs. John Callaway, Pauls Valley, president
Ottawa—Mrs. F. L. Wormington, president
Payne-Pawnee—Mrs. D. W. Humphrey, Cushing

Reduces Muscular Tension

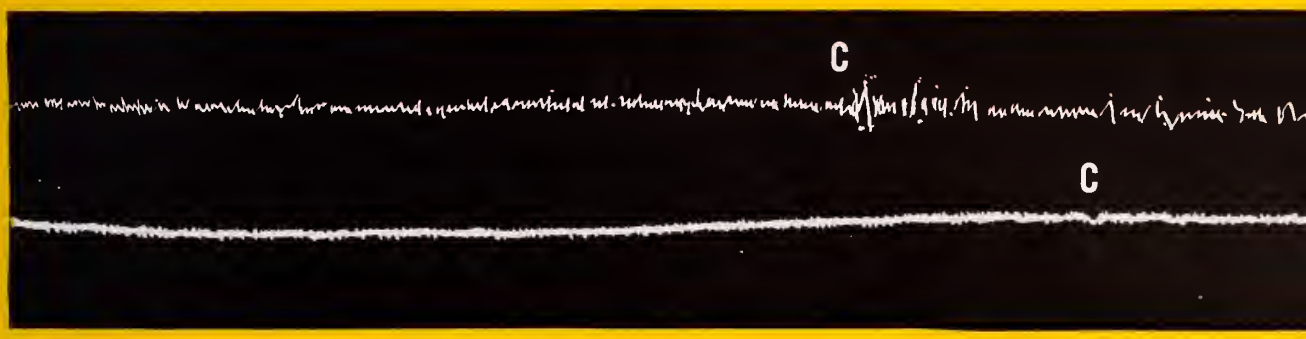
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Electromyography shows decisive response



Electromyographic study of neuromuscular hyperactivity in 42-year-old male with anxiety-tension syndrome. A, Before EQUANIL; action potential of high amplitude and frequency. B, After one week of ambulatory treatment with EQUANIL; showing definite reduction in tension, greater ability to relax, and marked improvement in muscular coordination. C, Point where patient makes effort to relax.[1]

The remarkable effectiveness of EQUANIL may be demonstrated in two ways. One is by its ability to relieve muscle spasm and neuromuscular tension.[1] The second is by its ability to relieve mental tension and anxiety.

Usual dosage: 1 tablet t.i.d. The dose may be adjusted either up or down, according to the clinical response of the patient.

Supplied: Tablets, 400 mg., bottles of 50.

1. Dickel, H.A., et al.: West. J. Surg., April, 1956.

anti-anxiety factor with muscle-relaxing action ... relieves tension

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Tetracycline *Lederle*

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Each month there are more and more reports like this in the literature, documenting the great worth and versatility of ACHROMYCIN. This antibiotic is unsurpassed in range of effectiveness. It provides rapid penetration, prompt control. Side effects, if any, are usually negligible.

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ACHROMYCIN SF

ACHROMYCIN with STRESS FORMULA VITAMINS. Attacks the infection—defends the patient—hastens normal recovery. For severe or prolonged illness. Stress formula as suggested by the National Research Council. Offered in Capsules of 250 mg. and in an Oral Suspension, 125 mg. per 5 cc. teaspoonful.



For more rapid and complete absorption. Offered only by Lederle!

[1]January, H. L. et al: Clinical experience with tetracycline. *Antibiotics Annual* 1954-55, p. 625.

Lederle

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Supplied:

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Comanche—Mrs. E. Stanley-Berger, Lawton, president
Custer—Mrs. Harold Tisdal, Clinton, president
Greer—Mrs. J. B. Hollis, Mangum, president
Northwest Counties—Mrs. M. C. England, Woodward, president
Garfield—Mrs. F. M. Duffy, Enid, president
Grady-Caddo—March 18, 1948, Mrs. L. S. Woods, president
Woods-Alfalfa—November 21, 1948, Mrs. C. A. Traverse, president
Jackson—Mrs. Harold Abernathy, Altus, president
Kiowa-Washita—Mrs. James F. McMurry, president

Mrs. Woodward aided by Mrs. Gallaher organized the Tri-County (Choctaw-Pushmataha-McCurtain) Society with Mrs. Henry D. Wolfe, Hugo, as president. With the assistance of Mrs. Donald L. Mishler, Tulsa, Mrs. Woodward organized the Rogers county group with Mrs. M. E. Gordon, Claremore, as president. Osage county was organized by Mrs. W. R. Rucker. Bartlesville, with Mrs. C. L. Stotts as president. In 1950 Logan, Lincoln and Tri-County (Atoka-Bryan-Coal) were formed.

As the Oklahoma State Medical Association district plans have developed and county associations have amalgamated so have their auxiliaries so that today both groups follow the same component society plan as near as possible.

The Silver Tray, purchased at the 1936 annual convention, was awarded to the county society which showed the most energetic response on this basis—percentage of attendance at regular meetings, and the quality of the annual report covering their activities in public relations, membership, health education, organization, program, *Hygeia*, and the Loan Fund. At the annual meeting in 1942 motion was made and passed that the tray be awarded as permanent possession to any county who received it three times not necessarily in succession. The tray was permanently retired to Oklahoma County upon its receiving the award the third time.

The constitution states in part that the purpose of this organization is to extend the aims of the medical profession. The distribution and sale of subscriptions to libraries, schools, offices, and individuals for *Today's Health*, the publication of the American Medical Association, has been a primary step. The magazine was known from its first issue in 1923 until February, 1950, as *Hygeia*. Sponsorship of radio programs, featuring physicians speaking on health problems, the first of which was in 1932, and active participation in the study and solution of local health problems are a few of the many varied methods followed in fulfilling this constitutional purpose. Health poster contests in the schools are usually followed by small cash prizes for the winners. Some units maintain with the aid of their advisory board a speaker's bureau of physicians, or furnish speakers from the auxiliary, for lay organization programs. Some groups help maintain special collections in the public library on medicine and hygiene. As early as 1935 and especially since 1942 mandatory vaccinations for school children has been an important project. Self-education has always been stressed.

During World War II a war work program included the sale and purchase of defense bonds, nutrition classes, programs teaching home nursing, and volunteer hours to the Red Cross. In January 1943, an editorial from the American Medical Association Auxiliary asked aid for the United States Cadet Nurses Corps program by interesting girls in the profession. Later Civilian Defense activities were encouraged and each county society was to appoint a Civilian Defense committee chairman. This is still an active part of the program.

Each county group has given time and money to various worthy funds such as the March of Dimes and since 1948 the Oklahoma Medical Research Foundation. Each group has also participated in local charities and helped supply local medical needs such as an iron lung. Crippled and underprivileged children have always been a primary concern as have needy expectant mothers.

All auxiliaries have studied the problem of socialized medicine. In February, 1943, Mrs. F. Maxey Cooper, state president wrote, "The private practice of medicine is being challenged by legislative measures. Because of the limited amount of time at the disposal

of each doctor, because of the added duties of practice, the Auxiliary must necessarily undertake the serious task of informing the public concerning these legislations." Mrs. Cooper was speaking particularly concerning the Wagner-Murray-Dingell bill then before the United States Senate. During her term as state public relations chairman, Mrs. William R. Cheatwood of Duncan traveled some 3,500 miles assisting local auxiliaries with short training courses on compulsory health insurance. She spoke not only to the physicians and their wives but under their sponsorship to such groups as P. T. A., business and professional groups and social clubs. A voluntary approach to the solution of economic health problems is the Blue Cross-Blue Shield plans and Auxiliary members are encouraged to acquaint themselves and others with the provisions of this plan as well as any of the many private health insurances available.

Some discussion had arisen about establishing a loan fund for children of deceased physicians for assistance through college. However, from the minutes of the May 26, 1930, annual meeting comes the information about the establishment of the Medical Student Loan. At the 1935 meeting Dr. Winnie M. Sanger (Mrs. Fenton M.) offered a sizable contribution if the loan fund would be changed to a Scholarship Loan Fund for women medical students. In February of 1936, Mrs. James M. Byrum, Shawnee, loan fund committee chairman for life, circulated a letter to the county presidents asking that additional funds be provided so that the Scholarship Loan could be given that year. In June of 1937 at the suggestion of Mrs. A. W. Roth, state president, a separate bank account was established and has so remained. With this monetary backing, the Auxiliary has worked, with favorable results, steadily at a nurses' recriutment program, part of a National Auxiliary project, holding open-house at the University of Oklahoma Nursing School and organizing for junior and senior high school girls future nurses' clubs. With the aid of local nursing organizations the Auxiliaries participate in High School Career Days across the state attempting in every way to show prospective student nurses the advantages of the field.

Contributions are also made to the American Medical Education Foundation a function of the American Medical Association Auxiliary which was founded in 1949 to stabilize American medical schools and to allow them to expand upward in quality and quantity.

In 1932 a section was established in the Oklahoma State Medical Association *Journal* for the auxiliaries with Mrs. John Z. Mraz, Oklahoma City as editor. Now the official organ of the State Auxiliary is *The Sooner Physician's Wife* which appears as often as six issues a year. During the presidency of Mrs. Warren T. Mayfield, Norman, and under the editorship of Mrs. Robert B. Howard, Oklahoma City, the first issue appeared May 1, 1948 under the title of *The Distaff* of the Woman's Auxiliary of the Oklahoma State Medical Association. The name was soon changed since another state auxiliary paper already carried the title *The Distaff.* Some of the larger units publish their year books.

As an organization grows, so develops its constitution.

From the five Articles and seven By-Laws of 1926, the constitution has developed into an impressive document of twelve Articles and sixteen Chapters of the By-Laws. No attempt has been made to place here a complete, current constitution but rather to make note of the major changes.

Article I. The name is the Woman's Auxiliary to the Oklahoma State Medical Association.

Article II. The purpose is now stated as (1) to extend the aims of the medical profession to all organizations which look to the advancement of health and health education; (2) to cultivate friendly relations and promote mutual understanding among physicians' families; (3) to participate in any endeavor on the request of the State Association; (4) to coordinate and advise concerning the activities of the component auxiliaries, and (5) to assist in the entertainment at all conventions of the State Association.

Article III. Membership is by membership in the component societies.

Article IV. The Convention, the legislative body of the Auxiliary, is composed of all

members. Voting delegates are the Elected Delegates from the Councilor Districts, the general officers, the Presidents of county and/or district auxiliaries, and chairmen of standing committees and special committees.

Article V. Moving up from the By-Laws, this section on the place of meeting has seen the least change.

Article VI. Officers are the President, President-Elect, First Vice-President, Second Vice-President, all of whom serve one year; the Secretary-Treasurer who serves for two years; and the Councilors who serve for three years, one-third being elected each year. Delegates to the American Medical Association Auxiliary are the immediate past president and those elected according to the national group's constitution.

Article VII. The Executive Board, now composed of the general officers and standing committee and special committee chairmen, meets before and after each Convention, at a mid-year meeting, and at the call of the President or on petition of one-third of its members. The Board carries out the mandates and polices set by the Convention and carries the full power and authority of the Auxiliary and conducts its business.

The last five articles are Finance, Referendum, Seal (see illus.), Amendments, and Constitution.

Chapter I of the By-Laws is Policy. Chapter II on Membership has five classifications—active, life, honorary, associate and members-at-large. Associate membership is for wives of interns and residents, or those of men in military or government service. Honorary membership has been extended only to Mrs. James M. Byrum, Shawnee (1876-1952) and Dr. Winnie M. Sanger, Oklahoma City (1874-). Chapters III and IV are Component Auxiliaries and Charters. Chapter V defines the fiscal year and makes provision for the amount of the dues to be set annually and provides that the proper amount be sent to the National Auxiliary. State dues are now $2.50 per capita of which $1.00 is sent to National. Convention, Executive Board, Councilor Districts, Election of Officers, and Duties of Officers are Chapters VI through X.

Chapter XI. The Advisory Board is a committee of five members appointed by the Council of the Oklahoma State Medical Association from their Association upon the request of the Auxiliary. Projects of any kind are undertaken only with the advice of this Board. In the earlier Constitution this Board consisted of past presidents of the Auxiliary. In the 1933-34 annual report written by Mrs. I. N. Tucker, Tulsa, a motion is reported passed to ask the State Association to appoint the Advisory Board as it does now.

Chapter XII. Standing Committees and Their Duties. These committees are (1) *Today's Health* and *National Bulletin* (2) Organization; (3) Program and Health Education; (4) Public Relations; (5) Press and Publicity; (6) Loan Fund; (7) Nurse Recruitment; (8) Civil Defense; (9) Mental Health; (10) American Medical Education Foundation; (11) Revisions and Resolutions; (12) Convention and (13) Credentials.

Chapter XIII. Conference. All officers, chairmen of the Standing Committees and Presidents and Presidents-Elect of the component societies meet at least twice a year in Oklahoma City for one-day conferences on the program for the year.

Publication, Parliamentary Authority and Amendments are Chapters XIV through XVI.

The Southern Medical Association Auxiliary since 1935 has sponsored Doctor's Day on March 30, the anniversary of the first successful use of anesthesia by Dr. Crawford Long in 1842. The Oklahoma Auxiliary as a member of the Southern co-operates with this custom of honoring the Doctors with special observances and the use of the red carnation as the official flower. This is often the time of many of the important social events of the year.

In 1936, Mrs. Charles R. Rayburn, Norman, state president in an article for the *Journal* said "Our third object is Social, for we believe bellowship helps to unite us in our one common cause." Throughout the existence of the organization this object has been of prime importance. Entertainment in connection with the state meeting as well as local teas, style shows, dinners and picnics—many of them honoring pioneer physicians, golf tournaments, open houses at hospitals, nursing schools and clinics as part of the public education program are just a few of the many activities that combine business and fun. At the 1956 convention the Auxiliary sponsored a Hobby Show. Helping a hard working professional man relax whether at home alone or with a group has always been the most important job of a physician's wife.



Mrs. Walter C. Bradford
Shawnee
1907-1909



Mrs. Thomas C. Sanders
Shawnee
1913-14



Mrs. Fenton M. Sanger
(Dr. Winnie M.)
Oklahoma City
1926-27



Mrs. Edward P. Allen
Oklahoma City
1927-28



Mrs. Willis K. West
Oklahoma City
1928-29



Mrs. James M. Byrum
Shawnee
1929-30



Mrs. L. M. Sackett
Oklahoma City
1930-31



Mrs. Earl D. McBride
Oklahoma City
1932-33



Mrs. A. W. Roth
Tulsa
1933-34



Mrs. Tazeel D. Rowland
Shawnee
1934-35



Mrs. Carroll M. Pounders
Oklahoma City
1935-36



Mrs. Charles R. Rayburn
Norman
1936-37



Mrs. Hugh Perry
Tulsa
1937-38



Mrs. George H. Garrison
Oklahoma City
1938-39



Mrs. E. Eugene Rice
Shawnee
1939-40



Mrs. W. A. Fowler
Norman
1940-41



Mrs. Edw. D. Greenberger
McAlester
1941-42



Mrs. Frank L. Flack
Tulsa
1942-43



Mrs. F. Maxey Cooper
Oklahoma City
1943-44



Mrs. Clarence C. Young
Shawnee
1944-45



Mrs. J. W. Rogers
Tulsa
1945-46



Mrs. Ollie McBride
Ada
1946-47



Mrs. W. T. Mayfield
Norman
1947-48



Mrs. Neil W. Woodward
Oklahoma City
1948-49



Mrs. Clinton Gallaher
Shawnee
1949-50



Mrs. James F. McMurry
Sentinel
1950-51



Mrs. Donald L. Mishler
Tulsa
1951-52



Mrs. John A. Wrenn
Sulphur (resigned)
1952-



Mrs. Charles A. Smith,
Norman
1952-53



Mrs. Millard L. Henry
McAlester
1953-54



Mrs. Wm. R. Cheatwood
Duncan
1954-55



Mrs. Eldon C. Mohler
Ponca City
1955-56



Mrs. Gordon Livingston
Cordell
1956-57

Picture was not available for Mrs. Herbert L. Wright, Shawnee, President 1931-32.



little

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The Student American Medical Association

A number of student leaders in the medical schools over the United States and physicians active in organized medicine were desirous of providing a means of introducing the student physician to the purposes and activities of medical associations. To accomplish this laudable end, delegates from forty-eight medical schools met in Chicago, in December, 1950, at the suggestion of the American Medical Association and formed the Student American Medical Association. The stated purposes of the organization were "to advance the profession of medicine, to contribute to the welfare and education of the medical student, to familiarize its members with the purpose and ideals of organized medicine, and to prepare its members to meet the social, moral, and ethical obligations of the profession of medicine."

Within a year of its founding, the first National Convention of the House of Delegates was held. A *Journal* was established and is published regularly nine months each year. By 1952, forty-four out of seventy-two four year medical schools and over 15,000 students were represented by the Association.

The structure of the student organization is similar to that of its parent organization. The Constitution and By-Laws provides for a House of Delegates. The executive authority is vested in a Council which is composed of the President, Vice-President, Treasurer, Executive Secretary and seven elected Council members. Three advisory members are appointed by the Board of Trustees of the American Medical Association.

The nine standing committees are: Publications, Internships, Selective Service, By-Laws, Medical Education, Conventions, Medical Service, Memberships, and Liaison with the American Medical Association.

The University of Oklahoma Medical School Chapter was represented at the first national convention in Chicago, December 27, 1951, by John M. Moore. Alternate delegate was Lawrence McHenry. The OU chapter has sent a delegate to every national convention and one of its members has been on the Council since its inception.

Two delegates from the OU Chapter of the Student American Medical Association were admitted to the sessions of the House of Delegates of the Oklahoma State Medical Association during the 1952 Annual Meeting. Representing the student chapter were William B. Stover and William F. Denny. By this action a precedent was established.

The Officers for 1952-53 were Tom Moore, Cleveland, president; Lawrence McHenry, Oklahoma City, vice-president; Jake Jones, Shawnee, secretary; Bob Stover, Cardin, treasurer.

Officers for 1953-54 were Lawrence McHenry, Oklahoma City, president; Cecil Chamberlin, Frederick, vice-president; James Calhoun, Beaver, treasurter; Guy Fuller, Oklahoma City, secretary. Delegate to the December, 1952, National Convention was R. R. Robinson, Enid. Alternate was O. H. Patterson, Ada.

By November, 1953, there were 63 active chapters of the Student A.M.A.

The current officers of the Association are: president, Paul Compton, El Reno; vice-president, Gregory Green, Seminole; secretary, Bill Bernhardt, Kingfisher; treasurer, William Savage, Oklahoma City.

The Student Association usually meets regularly not more than six times during the school year. One meeting year the students are the guest of members of the Oklahoma State Medical Association. The programs generally center around subjects related to the practice of medicine, rather than scientific subjects.

Faculty advisers for the group are George Garrison, John P. Colomore, and A. N. Taylor.

Editorials

Constitution

Article II

Purpose of the Association

This association is formed to promote the science and art of medicine.

In the minds of the founders this seemed to be the main idea since it is set out as the sole purpose. As time has gone by, however, the Association has taken on necessarily many other related functions. At the present it appears that these related functions have assumed the role of the purpose and the promotion of the science and art of medicine has been channeled by choice of the physicians into the hands of the specialists groups, the State Chapter of the Academy of General Practice, and the post graduate courses mainly those sponsored by the University of Oklahoma.

Is this bad? Not altogether, but the status of the State Association in the developing scheme of things should be recognized. It has less and less importance in the scientific field. Should an effort be made to restore this? It would appear from past efforts that this would be futile. Men have only so much time and strength to spare and if these are taken up by choice in other groups there is little left over.

There is one other bad feature. Many of our best minds are devoting their extra time and strength to other groups and it follows naturally that these groups as they develop will assume more and more the role of policy makers. These policies may be good but they should come from the State Association which can and does appraise such matters from the vantage point of seeing the State as a whole, its medical profession, its public, its hospitals, its educational institution and its press.

We need to seek out a means of restoring this strength to the State Association. It seems, perhaps that it can only be done by finding a way to embrace these organizations which have taken this from us, for we cannot wean the men from them. Could we ask these groups to hold their meetings under the canopy of the State Association with the Association, arranging for the time, the place, the exhibitors, both scientific and commercial, the public meeting, the entertainment and of course, for its own Council and House of Delegates.

When a group had demonstrated its effectiveness in its cooperation it might even be asked to send a representative to the House of Delegates. Any member of the Association would be welcome at the scientific session of any group. The man in general practice who has a talent for or interest in surgery or obstetrics or any other specialty would be received with pleasure at the sessions of state members of the College of Surgeons or the State Chapter of the Academy of Obstetrics and Gynecology or a specialist at the sessions of the Academy of General Practice. State committees could be selected on the advice of the organization whose special interest makes its members best equipped to serve.

Perhaps some other formula would be better, but some way must be found to restore to the State Association the scientific and intellectual power to which it is rightfully entitled.

Blue Cross, Blue Shield

At the outset and continuously since, the Blue Cross organization has had on the topmost shelf of its principles not to interfere with the relationship that exists between the doctor and the patient and between the doctor and the hospital. A further concept of its duty necessitates increasing benefits to the members as this becomes possible. The inclusion of tissue examinations as an additional benefit is quite natural. If payment for this were limited to the doctor by Blue Shield, there would be an interference of the Blue Shield and Blue Cross Plans in those situations where the hospital assumes

the responsibility for obtaining this service for the doctor and renders the statement. It may be deplorable in the minds of the profession that payment cannot come from Blue Cross if and when it does not exist. It is up to the doctor, not Blue Cross, to remove his services from the category of hospital service.

As a whole the physician has done real well in placing professional service where it belongs. He should, however, remember that *expert interpretation* by pathologists and roentgenologists and *expert administration* of anesthetic agents by qualified anesthesiologists are refinements and improvements of services which have been required for hospital patient care for many years. Until he is numerically enough and willing enough to take on the whole job in all the hospitals in the state it will be difficult to see that professional service is always clear cut.

Tribute to the Old Timers

R. Q. GOODWIN, M.D.

The 50th Annual Meeting of the Oklahoma State Medical Association, which was formed by the union of Indian and Oklahoma Territories in 1906, was highlighted by many activities May 6, 7, 8 and 9 in Oklahoma City. One of the events planned by the officers of the Association was to honor the senior citizens of the profession who attended the first meeting of the Oklahoma State Medical Association just fifty years ago.

Monday, May 7, in the Skirvin Hotel, a luncheon was given for these pioneers in medicine in Oklahoma. Seventeen of these physicians and surgeons of 1906 along with many of the Councilors and Vice-Councilors attended this luncheon. Incidentally, nine of this group are still practicing and all have been active through the years in building organized medicine in Oklahoma to its present high level.

For two hours we had the honored privilege of listening to 15 of these stalwart, happy, jubilant men—proud of their profession, proud of their State Association—tell of the first meeting of the Oklahoma State Medical Association and of their experiences in practice in the early days. Each had known the other for the most part through the half century sufficiently well that it was open season for needling and high altitude stories of their own and on others. Ranging in chronological ages from 73 to 87 years, these fellow physicians were biologically far below these figures, still dreaming of bigger and better things for medicine in Oklahoma and especially for THE OKLAHOMA STATE MEDICAL ASSOCIATION.

It is most unfortunate that every doctor in the State could not have seen and heard these men, for to have had this privilege, every physician would have been humble and filled with a determination to do the best he can with what he has in all situations as these men had to do.

Yes, we have a recording of every utterance for the archives but this is only the radio version; we have individual and group photographs but this is not the movie nor the television view.

This program was priceless for everyone there and makes us realize that it is not we who have done the honors but rather the elder statesmen of medicine in Oklahoma who have honored our Mutual Oklahoma State Medical Association by their presence and actions. While this individual program cannot be pictured nor reproduced for you, there is plenty left from whence this came. They dream of Tulsa for May, 1957, and many other State meetings. Let's make their dream come true.

Scientific Articles

Employees With Heart Disease in Industry, PROBLEMS *and* POSSIBLE SOLUTIONS

WILLIAM BEST THOMPSON, M.D., and CAMP S. HUNTINGTON, M.D.

THE AUTHORS

William Best Thompson, M.D. and Camp S. Huntington, M.D. are co-authors of the article on employees with heart disease. Doctor Thompson is certified by the Board of Internal Medicine in Cardiology, and practices in Oklahoma City. Doctor Huntington, of Bartlesville, specializes in industrial medicine. He was graduated from George Washington University School of Medicine.

In recent years the basis upon which industrial commissions in many states have granted awards for cardiac attacks or deaths on the job have become ridiculous, contradictory, and utterly confusing. The result is detrimental to all concerned—industry, labor, and the public.

In general, compensability of a heart attack or death due to cardio-vascular disease on the job is determined by the rather elastic and distortable yardstick of whether or not "unusual exertion" or significant trauma took place. There is usually no specification as to time interval between attack and alleged strain. In some states a man need only have his attack on the job for it to be compensable. In most states the final decision is made by a nonmedical commission which has heard eloquent and usually contradictory medical testimony by physicians for each of the interested parties—the company and the stricken individual. The commission often must make its own decision virtually without benefit of impartial medical counsel.

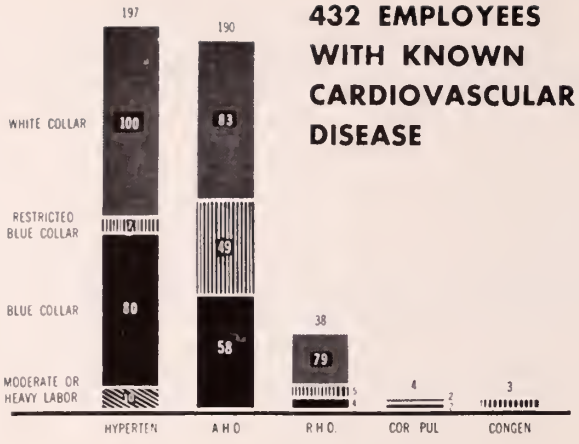
In Oklahoma, the law requires the presence of "unusual strain or exhaustion" before a cardiac case can be considered for benefits. Generally, the commission relies upon testimony given by physicians called before it by either the plaintiff or the defendant or both. This testimony is often conflicting and confusing. When it is, the commission frequently refers the facts to a third and presumably impartial qualified specialist for review and opinion.

The recognized and properly placed employee with heart disease is less likely to constitute a problem for industry, himself, and the Industrial Commission than the employee whose heart disease is unrecognized. For the last two years or so, we have been accumulating data on employees of Phillips Petroleum Company with cardiac conditions and have been evaluating and placing them according to their reserve. Although this survey is only a few years old, we believe that it does show interesting facts about the worker with cardiovascular disease.

Four hundred and thirty-two employees were found to have cardiovascular disease during their voluntary annual health examination or upon reports from their private physicians (figure 1). One hundred and ninety-seven were found to have hypertensive vascular disease with blood pressures of 160/100 or more. Another 190 had arteriosclerotic heart disease; 38 were diagnosed as having rheumatic heart disease, four as having cor pulmonale, and three as having congenital heart disease.

It was necessary to change certain aspects of the duties of only 64 of these employees. All 64 were in the skilled or semi-skilled manual labor group.

Of real importance to industrial medicine are the circumstances relating to the first clinical manifestations of arteriosclerotic heart disease. Eighty-two of the 190 with



coronary artery disease gave us no history diagnostic of an acute episode of coronary occlusion. Twenty-nine acute coronary occlusions occurred on the job; stress, either mental or physical, may have played a part in 10 of them. This figure compares with 80 acute episodes off the job, in 10 of which stress may have been a factor.

Forty-four deaths from cardiovascular conditions occurred in the two-year period ending in December, 1954. Two of them were associated with stress off the job, one with stress on the job. The remaining 41 occurred off the job and without stress. In more than half of the deaths, the worker was not recognized as having a cardiovascular condition prior to the terminal event.

Absenteeism presumably because of ill health accounted for the loss of nine working days an employee in the hypertensive group, 16 days an employee in the coronary group, and 10 days in the rheumatic fever group. The absenteeism for the entire cardiovascular group was 10 days an employee a year as against an overall absentee rate for the Phillips Petroleum Company of five-six days an employee a year.

If the 1,909 days absence for the 30 cardiac patients with initial acute coronary occlusion or infarction in 1954 are not included, then the overall rate for the remaining 402 employees with cardiovascular disease is 7.5 days an employee a year.

Figures 2 and 3 also illustrate the effectiveness of the properly placed employees with cardiac disease in 1954.

Now that we have indicated that the person with a cardiac condition is a worthwhile employee, what then are the main obstacles to the maximum employment of such persons in Oklahoma? We believe they are as follows:

(1) Awards by the Industrial Commission for heart attacks or deaths in industry are excessive in number and in amount of settlement. Four factors contribute to this situation:

(a) Lack of agreement among cardiologists of national and local repute as to the degree of physical or emotional stress and strain required to produce occlusion with or without infarction. Indeed, there is some disagreement as to whether or not these factors play any role whatsoever. Naturally, such disagreement by medical authorities results in considerable medico-legal chaos, and it is little wonder that industrial commissions make apparently inconsistent decisions with such inconsistent medical testimony.

(b) Lack of sufficient impartial medical counseling for the Industrial Commission.

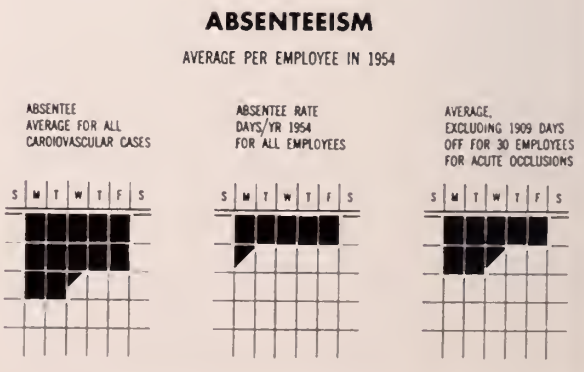
(c) The tendency of a few lawyers to try to "make a case" when none actually existed and the cooperation wittingly or unwittingly of an occasional physician with the resultant unjust award on the basis of clever presentation and manipulation of the English language.

(d) Pressure of some labor groups for awards without regard for facts directly or indirectly.

(2) The employee with cardiac disease himself is an important factor when:

(a) He may be handicapped by an overly cautious physician.

(b) He lacks knowledge of his condition, including understanding of the importance of graduated rehabilitation.



(c) He suffers an unfavorable emotional reaction engendered by the doctor, friends, family, labor groups or industry, or a combination of these.

(3) Labor itself is responsible for some of the unemployment of persons with cardiac disease because of:

(a) The power of seniority.

(b) Some labor contracts which are too inelastic to allow modification of a worker's job even temporarily.

(4) Finally, industry itself at times is a stumbling block for the person with a cardiac condition through:

(a) Its failure to recognize the applicant or employee with cardiac disease.

(b) Inadequate evaluation of the person known to have cardiac disease at the time of employment or, perhaps most important, subsequent evaluation during his working years.

(c) Its avoiding the cost of detailed evaluation of cardiac conditions by hiring nonafflicted persons.

All of these reasons add up to an unjustifiable risk for industry until some of these problems are solved and conditions under which awards are made are better stabilized. Only one of many pathetically ridiculous basis for awards is exemplified by a case in Utah. While two men were skinning a horse, one had a heart attack. The court was impressed only by the testimony that the horse weighed 1,800 pounds and overlooked the fact that there was no evidence that the deceased employee had lifted at all!

Having outlined the obstacles to employment of the person with cardiac disease and having indicated that properly placed he turns in a good work report, we believe that the following recommendations provide a nucleus for improving the situation both for the afflicted and for industry in this state.

(1) Certain definitions and basic concepts as to the relationship of strain, emotion, and environment to coronary occlusion or myocardial infarction should be worked out and agreed upon to some extent by physicians interested in the field. The matter of rating any disability following maximum recovery should also be considered. The details of planning such a meeting are not within the scope of this paper, although it should be arranged through the cooperation of the State Medical Society and the Oklahoma Heart Association.

432 "KNOWN" PRODUCTIVE CARDIACS AT END OF 1954



(2) A rotating panel of competent cardiologists or internists should be available to advise the Industrial Commission on medical facts as they pertain to the individual cases.

(3) We also believe that adequate preplacement examination of all industrial workers is imperative. The only really dangerous worker with cardiac disease is the unrecognized one.

(4) The use of the so-called "second injury" law in cases of disability or death resulting from a second heart attack would also lessen the burden on industry should the disability or death be judged compensable.

(5) A widespread insurance program should be designed to protect the employee from the financial disasters secondary to degenerative disease and catastrophic illness.

In conclusion, we believe that the well evaluated and properly placed person with cardiac disease is a safe, productive employee. We also fully realize that the resolution of these problems is not easy and will require fullest cooperation of all concerned. If approached with an honest willingness to give and take, so to speak, until certain reasonable definitions and standards are determined not only with respect to heart disease and effort but also to industrial and labor problems, then the wind of compensation will blow more consistently and fairly for all concerned rather than from all points of the compass.

Sexual INADEQUACIES *and Their* MANAGEMENT

JOSEPH W. KELSO, M.D.

THE AUTHOR

Joseph W. Kelso, M.D., is a practicing gynecologist in Oklahoma City. He is certified by the Board of Obstetrics and Gynecology and graduated from the University of Iowa School of Medicine.

For quite obvious reasons, I have not actually surveyed the records of my gynecologic practice, but I am, I believe, very conservative when I say that 25 per cent of the new patients coming to my office come solely for counsel concerning distressing sexual inadequacies which exist in their homes. Actually, they do not all give this reason for their visits, but they relate other symptoms in the hope that they will be questioned about this subject, which they have been taught from childhood is socially taboo.

If a gynecologist is careful in taking the history of his patient's domestic life, he will find that one out of every four new women coming to his office does so because of this serious problem. He will hear tales of pitiful existence as the result of sexual yearning without the least semblance of compatibility or satisfaction. This proportion would surpass my estimate if we included women who come with urgent surgical problems but are hurried off to the hospital without interest in the emotional problems, which may hinder what should otherwise be a smooth and uninterrupted postoperative recovery.

My estimate corresponds favorably with that of Dr. Arthur N. Berry,[1] whose careful survey showed that 25.2 per cent of his patients admitted sexual maladjustment, and with that of Dr. J. W. Johnstone,[2] who found that there was no compatibility in 33 per cent of 750 patients he interviewed, of whom eight per cent classified sexual congress as distasteful and another 11 per cent referred to the act as "a job to be done." These figures are appalling if true.

Sexual inadequacies are more far-reaching in causing sick and unhappy people than one can easily realize. All one needs for conviction, however, is to listen patiently to the pathetic stories of unhappy years of sexual tolerance instead of sexual happiness. Dr. Howard Taylor, Jr.,[3] concludes in his editorial entitled "Nine Months after Kinsey," that, "in spite of serious reservations, it appears that the gynecologist must know more about sexual behavior in the human female. Such information should contribute to the basic knowledge of the gynecologist in dealing with the complaints of patients who seem to have no organic basis." No truer words could be spoken, and the need for such medical assistance has prompted me to relate my experience with hormonal therapy.

For the past three years, I have been treating incompatible patients with testosterone cyclopentylpropionate, one of the longer-lasting androgen preparations, now sold under the trade name of Depo-Testosterone. The cases varied from those of total frigidity from the date of marriage, loss of former normal libido, and unexplained dyspareunia to those resulting from premature ejaculation in the male. One hundred and twenty cases are reviewed. The results have exceeded our expectation and, in many patients, have been phenomenal. The youngest of this group was 17 years of age, and 11 patients were past 50 years of age.

Of the 120 cases, 34 or 28.3 per cent have been classified as of the primary type, since

none of these women had ever been sufficiently sexually aroused to experience compatible coitus. I have designated the results as "compatible," "improved," or "failures." In the primary group of 34 women of various ages, 21 or 61.7 per cent became compatible; six or 17.6 per cent were improved; and seven or 20.6 per cent obtained no improvement and were classified as failures.

In the secondary group were 86 patients who had formerly experienced compatibility. Twenty of these patients dated their sexual difficulties from the time of a hysterectomy; 13 or 15.1 per cent gave childbirth as the etiologic factor; and one said the difficulty had followed an attack of mumps, which, judging from the history, was possibly a mumps oophoritis. Of the 86 patients, 68 or 79 per cent regained compatibility, and 12 or 13.9 per cent were improved; in only six patients or 6.9 per cent was there total failure.

The 120 patients showed variable response to medication according to age. The 17-year-old girl was cured of her difficulties, and 27 or 79.4 per cent of the 34 patients between the ages of 20 and 30 became compatible. Five more acknowledged improvement, and only two patients were classified as failures. Of the 46 patients between 30 and 40 years of age, 32 or 69.5 per cent were started on a normal sexual life. Eight others were classified as improved, and six were considered failures. In the 28 women between 40 and 50 years of age, there were 17 patients or 60.7 per cent in whom compatibility was established; four were improved; and seven were considered failures. Of the remaining 11 patients who were past 50 years of age, nine or 81.8 per cent acknowledged compatibility; one was improved; and only one was considered a total failure.

The side effects, which I hoped had been removed from this drug, were still present. In a few patients, I noted a slow but steady rise in blood pressure, although it subsided rapidly after the drug was discontinued. Voice changes occurred in 13 patients or 10.8 per cent; two such changes, although not s e v e r e, are apparently permanent. Twenty per cent of all patients developed an appreciable hypertrophy of the clitoris. Abnormal hirsutism resulted in nine patients or 7.5 per cent. It was rather severe in a few patients, but in all nine it disappeared slowly after the drug was discontinued. There were two cases of severe hives, and in both patients the drug was discontinued. In four patients there was undesirably severe acne, and in two of them it became necessary to discontinue the drug. Peculiarly enough, I saw no evidence of edema, water retention, in any of these 120 patients. There were two cases of unmistakable thyroiditis, and they gave me a long period of concern, but both have cleared up without sequelae. The drug was discontinued and later reinstituted in smaller doses in one of these women with a most satisfactory restoration of compatibility.

Discussion

My interest in the use of Depo-Testosterone resulted from the knowledge that some elderly women became disturbed by the sexual stimulation they experienced while being treated with testosterone for disabling arthritis. This reaction was of such magnitude that the drug had to be discontinued. However, with this information and the knowledge that such a therapeutic agent was seriously needed, I undertook the observation.

My investigation was done on my private patients, for they, as we all realize, provide better subjects for such research than underprivileged, unhappy clinical patients. However, my choice somewhat precluded a control series, because one's private patients are not knowingly willing to be a part of an experiment. However, there is no question from my careful observation of these women that the action of the hormone is pharmacologic. The exact action of the drug is not known to me, but it does promote sexual response and allow compatibility to occur.

The dynamic response often resulted within 48 hours, but most of the successful responses came soon after the second administration. The drug's action has been so forceful that five patients were considered to have been over-stimulated to the point that they became uncomfortable from excess sexual desire, which continued for from several to 48 hours after the drug had been given.

Hypertrophy of the clitoris occurred in only 20 patients and was a partial factor in

obtaining proper sexual contact in some of them. However, some patients, who were classified as failures, had unmistakable clitoral engorgement and hypertrophy.

I realized the psychologic element involved in women with such sexual difficulties, and I made every effort to guard against suggestion. Instead, I emphasized to these patients that the drug would be given on a trial-and-error basis and that its use carried no assurance of success. White-haired women have said that they have had their first compatible congress.

A drug which can induce normal sexual life in 21 of 34 patients who had never experienced compatible congress seems to demand consideration as a valuable addition to our armamentarium. Testosterone is not carcinogenic to women, and the high percentage of reversibility of the undesirable side effects makes the risk not too great.

The dose schedule was 150 mg. at the first administration, 100 mg. in one week, and 100 mg. three weeks later, with repetition of 100 mg. as often as indicated to maintain normality. I made a point of not seeing the patient at the time of her second hypodermic, but I always discussed the situation before the third dose was given. Occasionally it was omitted and, in many patients, further medication was unnecssary. In such patients the educational advantage obtained during artificial stimulation was sufficient to maintain compatibility. Possibly some advice which I gave to these patients, relative to recognition of the sexual stimulation, should it occur, might be considered to have had a psychologic effect in the success of this group of patients. But there is no doubt that the stimulation results from the effects of the drug itself and not from the personality of or the information given by the administrator.

Conclusion

1. Sexual incompatibility is a serious gynecologic problem.

2. One hundred twenty patients were treated with testosterone cyclopentylpropionate. Of 34 women who had never had compatible sexual congress, 21 achieved it after such therapy. Of another 86 who had formerly had compatibility but lost it, 68 regained it.

3. Undesirable side effects may occur, but they can be prevented or minimized by careful observation during therapy.

4. The primary result of the treatment is from the pharmacologic action of the drug, but valuable sexual education is achieved during administration of the drug.

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ACKNOWLEDGMENT — The testosterone cyclopentylpropionate used in this series was contributed by the Upjohn Company of Michigan.

Golf Tournament Planned

The third annual Pfizer sponsored golf tournament for members of the Oklahoma State Medical Association will be held Wednesday afternoon and evening June 20 at Hillcrest Country Club, Oklahoma City. Physicians are asked to watch for a postcard to be mailed soon giving more details. Playing will begin at 1:00 p.m. and a social hour and buffet will be held following golf.

MUSHROOM POISONING

H. A. SHOEMAKER, M.D.

THE AUTHOR

H. A. Shoemaker, Ph.D., is Professor of Pharmacology at the University of Oklahoma School of Medicine, Oklahoma City. His article on Mushroom Poisoning is one of a series to appear in conection with the setting up of the Poison Information Center.

The incidence of poisoning by mushrooms has decreased markedly as a result of the improvement in identification along botanical lines. There are a number of rules, considered by many as infallible, which have been promulgated, but they can only lead into trouble if they are not based on botanical features. Ford,[1] who has probably done more work on the poisonous mushrooms than any other American worker, said: "There are no simple rules, such as peeling the top or pileus or cooking with a silver spoon which will enable the collector to determine whether mushrooms are edible or poisonous." Krieger[2] states: "Those who, unadvised or ill-advised, would gather wild species for the table should remember that they are embarking upon an adventure that may lead to a sudden and horrible death." The purpose of this paper is not to give all of the factors that may serve as a method for identifying the various mushrooms for use as a food but as a possible guide to the physician who is called to treat a child that has been found in the yard eating mushrooms or "toadstools." The term, "toadstool," has become associated in the lay mind as being synonymous with the poisonous or non-edible species as distinguished from the edible. It is hoped that the information contained herein will be of assistance in the diagnosis and treatment of cases of mushroom poisoning that may come to the attention of physicians.

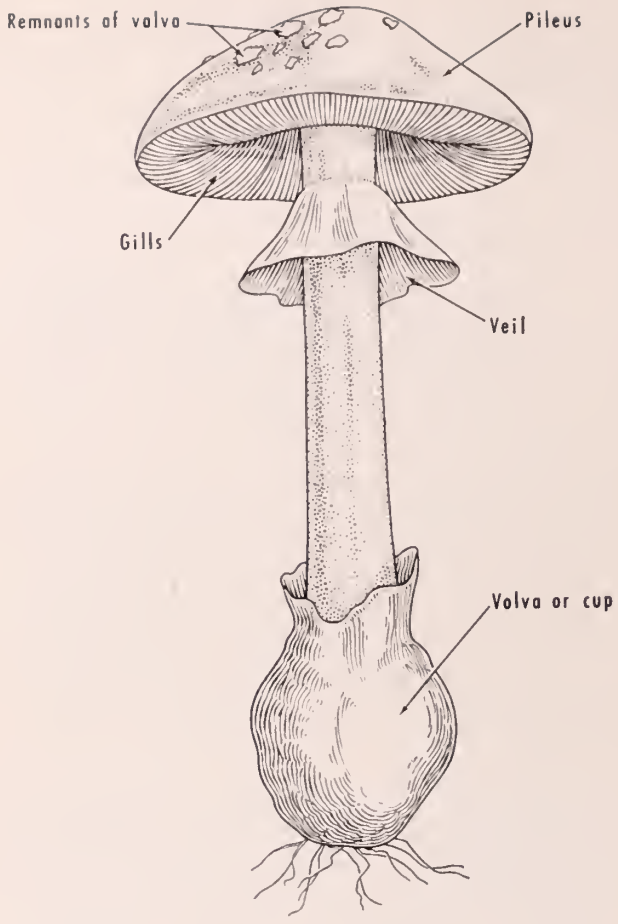
The identification of the species that is involved is always a problem. Either the parent cannot give a good description of the plant, or if a specimen is brought to the office, it is usually incomplete, crushed, or otherwise rendered unfit for identification purposes. Consequently the physician is faced with the problem as to what course to follow in treating the patient. An additional complication occurs when symptoms of poisoning develop after such a prolonged period after the ingestion that the history may not reveal the fact that mushroom might be involved in the illness. Unless positive identification can be made of the species, and if there is a more or less definite history of the child having eaten a mushroom or "toadstool," it is best to empty the stomach as soon as possible. The use of emesis or gastric lavage must be determined by the physician*. It must be remembered that large particles cannot ordinarily be removed by lavage.

Professor Howard W. Larsh,[3] Chairman, Department of Plant Sciences, University of Oklahoma, is of the opinion that we have at least three deadly poisonous mushrooms that grow in Oklahoma: *Amanita phalloides, Amanita muscaria,* and *Lepiota Morgani.* It is estimated that 90 per cent of mushroom deaths in the United States are caused by *Amanita phalloides.*[4] There probably are other toxic species to be found growing in the State but they are uncommon. It must be kept in mind that some persons may have gastro-intestinal disturbances from the ingestion of some of the "edible" species of mushrooms. Mushrooms which are beginning to decompose may produce gastro-intestinal symptoms.

The descriptions given below have been compiled from information obtained from Ford,[1, 5] Krieger,[2] Thomas,[6] and Charles.[7] The schematic drawing (figure 1) will help to locate and identify the various parts of mushooms.

Amanita phalloides (Deadly Amanita, Destroying Angel) grows to a height of four to six inches, the stalk being one-half to three-fourths inch in diameter. The upper

*A subsequent article by Henry B. Strenge, M.D., professor of Pediatrics, University of Oklahoma School of Medicine, will deal with the problem of emesis and gastric lavage in the emergency treatment of poisoning.



Characteristic features of Amanita

Figure 1

expanded top or pileus, having a diameter of three to four inches. The stalk is set in an expanded cup or volva (not always as distinct as in the drawing) which is frequently called the "poison cup" since it is a characteristic feature of many poisonous species. The upper part of the stalk has attached to it a filmy, delicate ring, the annulus or veil, about one-half to one inch from the junction of the stalk and pileus. The gills and spores are white. The pileus is usually smooth and white. Occasionally delicate flakes, remnants of the volva which are easily brushed off, are found on the upper surface. The entire plant is of a peculiar dead white, except the upper portion of the pileus, which may be chalky white, smoke colored, delicately yellow or slightly greenish. The species is sometimes divided into different varieties by botanists on the basis of color. The smaller form of this species which often appears in early spring is pure white. This often is named *Amanita verna*.

Amanita muscaria (Fly agaric, Fly poison, Fly Amanita) is characterized by the more or less distinctive color of the pileus, which may vary in color from a brilliant yellow to orange to deep red. This species is slightly larger than *Amanita phalloides*. The stalk, the gills and the spores are white. The top surface of the pileus has scattered over it a number of prominent white scales, which are easily brushed off. These are remnants of the volva. An annulus or veil is present on the stalk similar that found in *phalloides*. The stalk is not encased in a distinct volva but is bulbous at the base. The bulb as well as the stalk may be scaly from adhering fragments of the universal veil.

Lepiota Morgani (*Lepiota molybdites*) is a fairly large mushroom, growing to a height of six to nine inches and with a cap or pileus five to nine inches in diameter, occasionally even more. The characteristic features are the yellowish or brownish cuticle on the pileus which breaks into scales, except in the center, as the pileus expands. The gills are white, becoming green in the older plants. When first picked the gills may be white but will assume the characteristic greenish tinge after several hours at room temperature. The stem is smooth, firm and hollow. The annulus or veil is present. A volva is not present but the lower part of the stem is bulbous. The species is easily mistaken for the edible species, *Lepiota procera*.

There are many other species of mushrooms which may be toxic but space does not permit more extensive descriptions. The publication by Charles[7] is recommended for more detailed descriptions of the above and other species of mushrooms. An absolute identification can only be made by a competent mycologist and this would entail considerable loss of time in treatment and often there is no specimen to examine. Fortunately, most of the mushrooms found on lawns where young children are likely to get them, are not toxic. The usual habitat of the very toxic *Amanita* is in woods, but they may also be found on lawns. *Lepiota Morgani* grows in open spaces and is rarely found in woods. It, therefore, may be found growing on lawns. The common stinkhorn, *Phallus impudicus*, which is often found in abundance on lawns in late summer and autumn has not been reported as toxic. There have been

instances where young children have been found eating them regardless of their very offensive odor.

Symptoms of Poisoning

The symptoms of poisoning by *Amanita phalloides* and *Amanita muscaria* are quite distinctive. The best descriptions of them, quoted below, are given by Ford.[1]

Amanita phalloides. The symptoms "begin to come on after a distinct prodromal stage of six to fifteen hours,** being ushered in by extreme abdominal pain, vomiting, and diarrhea. Both vomitus and stools contain undigested food, blood and mucus. There is rarely constipation. The urine is usually straw-colored, not tinged with hemoglobin. Anuria is seen not infrequently and is especially important. Paroxysms of pain and vomiting alternate with periods of remission which however are usually brief. The extreme suffering usually brings on the "Hippocratic facies," *"la face vulteuse," of the* French writers. The loss of strength is rapid and excessive. Jaundice, cyanosis, and coldness of the skin, especially of the extremities, develop within two or three days. The course of the disease is from four to six days in children and six to eight days in adults. Before death the patients often sink into a profound coma from which they cannot be roused. Ocular symptoms such as trismus are rare and the pupils are usually normal in size, reacting to light and accommodation. Nervous and mental symptoms occasionally occur, but convulsions are rare except as a terminal event, and in children. When large quantities of the fungus are eaten a very profound intoxication may develop, death occurring within 48 hours. Young children are highly susceptible and in general are less apt to survive than adults. The majority of cases are produced by well-cooked plants, but those who eat the fungi raw are apt to be more profoundly poisoned. One or two specimens, a single specimen, or even a part of a specimen may bring on violent poisoning and death. Rarely chronic intoxication develops, the patients surviving three to four weeks. In the non-fatal cases the serious symptoms begin to subside in six to eight days and the patients slowly recover, being restored to normal health and strength in about a month. In addition, many cases of less profound intoxication are seen due to the ingestion of small quantities of the plants and here the violent gastro-intestinal symptoms may subside rapidly, the patients recovering in a few days."

Amanita muscaria. "The symptoms of poisoning by *Amanita muscaria* are so striking in characteristic as to lead to an early accurate diagnosis. Almost immediately following its ingestion, sometimes in one or two hours, and usually in five or six, the patients begin to show an excessive salivation, perspiration, and lacrimation accompanying a violent retching and vomiting, with a profuse diarrhea with watery stools. The pulse is slow and irregular, the respirations accelerated, and the patients dyspneic, the bronchi being filled with mucus. Mental symptoms come on rapidly, giddiness with confusion of ideas and rarely hallucination. There is a great variation in the intensity of the different symptoms, sometimes the gastro-intestinal disturbance being the most prominent, at other times the mental and nervous symptoms predominating. When small quantities of the fungus are eaten the symptoms may be very mild, consisting of an excessive salivation and perspiration with a vague feeling of discomfort and uneasiness in the stomach and bowels. In more severe cases the vomiting and diarrhea may be so excessive at the start as to rid the alimentary canal of the offending material, after which the mental and nervous symptoms become the more prominent feature. Finally when large quantities of the fungus are eaten the nervous and mental manifestations may be seen in the early stages of poisoning, the patients showing delirium, violent convulsions, and an early loss of consciousness from which they cannot be roused; or the patient may retain consciousness only to die from paralysis of the respiration. Finally, in certain cases after a preliminary attack of nausea, vomiting, and diarrhea, excessive perspiration and salivation, the patients sink into a deep sleep which lasts several hours from which they wake profoundly prostrated, but on the road to recovery. In nearly all cases of *Amanita muscaria* intoxication the pupils are contracted and fail to

**Wölkart et al. (8) quote references where the delay in the development of symptoms was as long as forty-eight hours.

react to light and accommodation. The condition of the pupils is important and should always be observed carefully since they furnish an important aid to the correct diagnosis. In mild cases of poisoning by *Amanita muscaria* and in severe cases properly treated the prognosis is good, the patients being restored rapidly to normal health."

The symptomatology produced by *Lepiota Morgani* intoxication is not as well described as very few cases of poisoning by this species have been reported. Charles[7] states that "Many instances of poisoning are well substantiated, and extreme inconvenience and serious illness have resulted from eating very small pieces of the uncooked mushroom." Ford[1] quotes several references dealing with *Lepiota Morgani* poisoning. The symptoms occur shortly after ingestion, usually within an hour but occasionally within three to five minutes. They consist of abdominal discomfort followed by vomiting and diarrhea with profuse watery stools. The vomiting may last only a few hours but the diarrhea may last throughout the next day.

Treatment

The first step in the treatment of any case where there is a history of having ingested mushrooms which might possibly be toxic is to empty the gastro-intestinal tract. This is best accomplished by emesis or emesis plus gastric lavage together with the use of a saline cathartic. In the rapid type of mycetismus (mushroom poisoning), if emesis or gastric lavage has not already been performed, the vomiting and diarrhea is of value in removing the poisonous fungi from the gastro-intestinal tract.

The specific antidote for poisoning from *Amanita muscaria* is atropine since this species contain muscarine, a parasympathetic stimulant, and possibly some other toxic substance. The symptoms appear to be, for the most part, due to the muscarine. Vander Veer and Farley[9] suggest atropine hypodermically in doses as high as 2.5 mg. in adults in all cases where there is evidence of the action of muscarine. This dose may be repeated at 30 to 60 minute intervals as necessary to produce the desired effect. The dose should be adjusted to appropriate levels in children. In cases where the patient shows evidence of collapse appropriate stimulants should be used. Leschke[8] is of the opinion that atropine is contraindicated if the excitement stage is present. Goodman and Gilman[11] state: "Atropine provides a specific antidote and the prognosis is good even in severe cases if this form of intoxication is recognized and atropine administered."

The toxic principles in *Amanita phalloides* are probably *phalloidine* and *amanitine*. There is no specific antidote. Emetics and gastric lavage are of little value when symptoms develop, but thorough purging is important to empty the ileum and colon quickly. In some cases it may be advisable to use high colonic enemas in place of a cathartic. Opiates are usually indicated for the relief of the severe abdonminal pain. Fluids should be administered, particularly dextrose in physiological saline, to combat the dehydration and acidosis. A liquid diet with a high carbohydrate content should be given when possible. Large amounts of carbohydrates appear to protect the liver to some degree against the damage that accompanies this type of intoxication. Plowright[12] is of the opinion that atropine is not effective in *Amanita phalloides* intoxication and may even be detrimental.

The treatment of *Lepiota Morgani* intoxication appears to be entirely supportive and symptomatic, in as much as no definite instructions for treatment were found in the literature.

Summary

The poisonous mushrooms likely to be found growing in Oklahoma are described briefly and suggested methods of treatment are outlined.

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Special Article

The Prevention and Treatment of INJURIES *to* ATHLETES

DON H. O'DONOGHUE, M.D., and KEN RAWLINSON

THE AUTHOR

Don H. O'Donohue, M.D., an Oklahoma City orthopedist, has prepared a series of articles on athletic injuries. The first of three articles appears in this issue. Doctor O'Donoghue was graduated from the University of Iowa School of Medicine and is Certified by the Board of Orthopedic Surgery. Mr. Rawlinson is head trainer, University of Oklahoma Department of Athletics.

Athletic endeavor has from time immemorial been the natural inclination of our youth. In pre-high school this has been until recently of an unorganized type. By the time high school is reached a lesser proportion follow organized athletics. The college years find a smaller but none the less considerable group to whom athletics is a major, sometimes the major, interest.

While the spotlight of publicity has shone brightly on those facets of great reader interest, comparatively little attention, outside the confines of the sport itself, has been paid to conditioning and to injury. An occasional blare of publicity follows a major injury to a stellar athlete or the untimely death of a budding prep school player. Occasionally this triggers a lay magazine article on the importance of proper equipment and the value of physical conditioning as important factors in the prevention of injury. In the final analysis, however, the lay public and, I fear, the majority of our medical profession, has little knowledge of the actual mechanics of training and the treatment of athletes who are injured.

In order to realize what makes a given program superior and another inferior, it is necessary to set some criterion of perfection for any given situation. Obviously, all schools cannot have identical programs. Each must modify the ideal to fit best the realities of its particular situation. All should strive for continuous improvement.

In Oklahoma, the perennial success of the "Big Red" and in particular the dazzling display of speed in the recent "Orange Bowl Game" has focused attention on conditioning as such. Opposition players themselves inquired as to the O.U. training program. They were able to see first hand that conditioning, physical as well as mental, was playing a vital part in the success of "Bud Wilkinson and Company."

In order to take a long look at the whole problem of physical training, I have asked Mr. Ken Rawlinson, Head Trainer of the Athletic Department of the University of Oklahoma, to collaborate with me in the preparation of this series of articles requested by the Oklahoma State Medical Association. It is our hope that the whole level of physical management of athletes throughout the state may continue to be raised by pointing up the important elements of a successful athletic training program.

Why is it important for young men to participate in athletics? Perhaps the solution of the problem of athletic injuries lies in the prayer of the timorous mother that her boy not compete. Abandonment of sports would certainly be the quickest way to prevent injuries to the contestants. Are there real benefits—true tangible benefits—to be derived from athletics? Let us examine for a a bit the pros and cons of this question.

Benefits of Athletics to the Participant

A. Physical Benefits.

No one can seriously doubt that athletics in its various phases serves to build a strong, healthy body better able to serve its possessor through a long and useful life. The myth

of the "Athletes Heart" has been dissipated. The ex-athlete that "turns fat" when his years of competition have ended at least has postponed his impending adiposity throughout the years of his vigorous training. The trained athlete is outstandingly superior to his more sedentary fellow in drive and stamina, better fitted for both work and play.

B. Character Building.

Under proper circumstances and surroundings the athlete acquires or strengthens many attributes of character that will serve him well throughout his life. The fact that the word "sportsmanship" seems trite in no way has changed its reality as a trait of character. Team effort as opposed to individual glory; the ability to take a job and follow it through; the necessity to "take it" as well as "dish it out"; the sacrifice of immediate gain to the final goal; are all basic lessons learned by the successful athlete. The development of "desire" provides its own incentive toward character building that will serve well throughout life.

C. Material Benefits.

Much has been said about scholarships, especially by those who know the least about them. Suffice it to say that the athletic scholarship does permit many a lad to finish his education who otherwise would have dropped out of school long before. The athlete, scholarship or not, has a keen incentive to stay in school and I think a good estimate of the quality of the scholarship program of a given institution can be made from the proportion of the scholarship boys who go ahead to graduation.

D. Later Benefits.

So much for the benefits of athletics to the student in school. What about after graduation? It has been said that the athlete out of school is as a "fish out of water!" Not so! Many athletes make some form of physical education their career. We all know of the big name coaches. But what about the myriads of others in every crossroads and hamlet of our country? Look in the grade schools, the high schools, the YMCA programs, the sand lots, the boys clubs, the Boy Scouts, and you will often find an ex-athlete carrying on the program. Not only do these organizations provide a life work for the ex-athlete but the athlete fills an irreplaceable need in the training of our youth.

On a more personal plane, many athletes make contacts during their school years with men who are seeking their very type of person to man the leading jobs in industry. In 25 years of knowing athletes, I have seen most of them display the same fine enthusiasm and attain the same great success in life as they did in school. Many of them have very responsible positions for which the original contact was made in school.

Yes, I think we can make out a very strong case *for* the athletic program. What about the other side of the coin? How about the disadvantages?

Disadvantages of the Athletic Program

A. Does Athletic Participation Interfere with Studies?

Perhaps it does sometimes. Far more frequently, however, it provides incentive to the student to work harder in order to justify his athletic participation and permit its continuation. Undergraduate students can usually find time for both studies and athletics. They are encouraged to budget their time by the very necessity for study, practice and a good night's sleep.

B. Does the Athlete Get a Big Shot Complex?

Not for long! With few exceptions his teammates take care of that. Frequently the cocky, smart alecky youngster is trained to the necessity of cooperation and to realize the value of his teammate.

C. Is the Athlete Pampered in School?

No. On the contrary, the spotlight of publicity prevents that in the stars and the others have little opportunity or desire to be favored in any way.

D. Does it impair physique later in life?

Emphatically no. The exceptions prove the rule that athletes as a whole live longer, more active lives.

E. Do athletes get physical injuries?

Emphatically yes! Here is a very real objection to the athletic program. In fact, almost the only real disadvantage.

Here is our challenge. What has been done, is being done, and can be done to (1)

prevent injuries, (2) minimize temporary disability, (3) prevent permanent disability.

Much, indeed, has been accomplished in the last 20 years toward these ends. Not too long ago the trainer in most institutions was either non-existent or was a graduate from the supply room, his major equipment being a roll of tape and a bottle of liniment. His aim was to "keep 'em rollin'." The doctor was a necessary evil to be avoided if possible. The conviction was prevalent that, once the player reached the doctor his days as an athlete were over. Too often this was true, for two pregnant reasons. First, the player reached the doctor as a last resort and long after ideal treatment could have been instituted, and second, the doctor f a i l e d to realize the importance of 100 per cent rehabilitaton to that particular individual, and tended to belittle his keen desire to return to athletic competition.

In the past, there has been a tendency on the part of the coaching staff to demand that the player continue in spite of injury or be labelled "yellow." The trainer was urged to "tape 'er up" and "run him back in"—often to the detriment of the player, the team, and the score! More enlightened consideration has revealed that *everyone* is better served by promptly and ably treating the injured player and so obtaining his recovery before he does himself irreparable damage. The successful coach is indeed the protector of his players and seeks to prevent permanent injury of either body or mind.

In the well run athletic program of today, the coach, the trainer, the team physician and the specialist all combine in one effective working unit designed to maintain the players in optimum physical and mental condition.

The time when the player, coach, trainer and physician are all working at cross purposes is rapidly becoming a thing of the past. Athletic injuries are becoming less frequent. The severity of the injury is less. The period of disability is shorter. The degree of recovery is more complete. We shall examine the factors that tend to implement such an improved situation. The priceless ingredient is the complete confidence and cooperation of coach, trainer and physician if the program is to succeed. The familiar medical triad, (1) prevention, (2) treatment, (3) rehabilitation, is doubly applicable here. The cycle of cooperation and responsibility runs from—

Coach to—
Trainer to—
Physician to—
Specialist to—
Physician to—
Trainer to—
Coach, with complete rehabilitation the goal.

So, we have set the theme. Athletics are important and should be continued. Conditioning is important and will prevent injuries. The injury should be prevented if possible. Once an injury occurs it should be treated promptly and adequately. Recovery must be complete. 100 per cent rehabilitation must be the goal.

In the subsequent articles, we will attempt to outline more specifically what measures can and should be taken in order to make these goals obtainable.

(*End of First Section*)

PRESIDENT'S LETTER

When I returned home from the State Meeting in Oklahoma City, I was so in love with my graces and so eaten up with vanity that I rather expected the driveway to my home to be covered by branches of Palm trees and that the Little Woman and the three Sons would greet me with: "Hosanna, Here comes the King!" Alas, the driveway was barren, and no one was at the door. Upon entering the house, someone casually asked if *i* had procured a boat for the Minnesota trip.

It is a good lesson, but often a hard one, for a man who dreams of fame and of making for himself a rank among the world's dignitaries, to step outside his narrow circle and mingle with youngsters. They have a great levelling influence. They, the youngsters, are the greatest asset of this or any other country. Yet—are we fulfilling our obligations to them? Did you visit the National Science Fair? If not, you missed one of the greatest displays of scientific projects and mental brilliancy Oklahoma has ever seen.

Time and time again I have been greeted by, "Doctor, we know you are a busy man," until I have come to believe the implications. Am I b u s y ? Surely—spinning my wheels and "Majoring in the Minors." It might be well for the Medical Profession to shed its thin cocoon and contribute something more than money—TIME—to the real problems in our communities.

The other day Mr. "Dick" Graham and I were discussing how inspiring it would be to the citizens of our State if each County Society would undertake and pursue one project. I will give you a "fur instance." Your local schools—not applicable just to your child but to the entire school. I have very little use for gadgets; all the gymnasiums, basketball courts, tape recorders and movie projectors will never make a good school. We must have good educators and then we, the parents, must defend them as they diligently apply the basic principles of education. What are some of the basic principles? All of us who are adults know that life is a hard taskmaster. There are hurts of every sort to be endured—physical, emotional, moral. A school should be a microcosm, reproducing in smaller compass and in muted intensity the labors, rewards, rejoicings, and punishments of life. Youngsters s h o u l d be gradually hardened by experience adapted to their strength for the tough struggle of later life. WE, as parents, have been trying to make life easier for our progenies. THIS, WE *CANNOT* DO. WE have been a great contributing factor to their failure.

It is my unvarying experience that youngsters prefer a fixed set of rules, with fixed penalties for every offense and every offender. They dislike in discipline, as in instruction, all indefiniteness, all fuzziness, all respecters of persons. It is my belief that children not only need, but desire, a definite code in which they know the parent and teacher believe and which they see applied without fear or favor to one and all. Thus, if the youngster is given responsibility and proves unworthy, he receives a penalty well understood by all, and he forfeits the privilege he has failed to deserve. Our own generation has undermined this code. By protecting the individual from the consequences of his actions, we have made a mockery of the principles of responsibility, and we have weakened him for the inevitable collision with reality of later life. We have been interested in flattering our egos and by playing the psychiatrist and drawing delicate distinctions of casuistry. Forgetting that our first duty is to teach the great moral verities, we have bred into them doubt as to their moral convictions. I am not too worried (I will catch it for this) about their psychiatric problems. All adolescents have them, and most youngsters will fight them out for themselves.

Now, what type of curriculum should we demand—and get?

It is 2:00 a.m., and my wife insists that I stop crusading. Do you want more like this or something on U 235 or 8?

Tom McClure M.D.

President

IMPORTANT RESEARCH CONTRIBUTION

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Investigations with Nilevar show that nitrogen, potassium and phosphorus are retained in ratios indicating protein anabolism. Nilevar is thus the first steroid which is primarily anabolic and which provides a practical means of meeting the numerous demands for protein synthesis.

NILEVAR IS ORALLY EFFECTIVE • Clinical response to Nilevar is characterized not only by protein anabolism but also by an increase in appetite and an improved sense of well-being.

SAFETY AND PRECAUTIONS • Nilevar has an extremely low toxicity. Laboratory animals fail to show toxic effects after six months of continuous administration of high dosages. Nilevar should not be administered to patients with prostatic carcinoma. Nausea or edema may be encountered infrequently.

DOSAGE • The daily *adult* dose is three to five Nilevar tablets (30 to 50 mg.) but up to 100 mg. may be administered. For *children* the daily dose is 1 to 1.5 mg. per kilogram of body weight. Individual dosages depend on need and response to therapy. Nilevar is available in 10 mg. tablets. G. D. Searle & Co., Research in the Service of Medicine.

INDICATIONS:

Nilevar is indicated in the vast area of surgical, traumatic and disease states in which protein anabolism is desirable for hastening recovery. The specific indications are:

1. **Preparation for elective surgery.**
2. **Recovery from surgery.**
3. **Recovery from illness: pneumonia, poliomyelitis and the like.**
4. **Recovery from severe trauma or burns.**
5. **Nutritional care in wasting diseases such as carcinomatosis and tuberculosis.**
6. **Domiciliary care of decubitus ulcers.**
7. **Care of premature infants.**



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SEARLE

Annual Meeting Highlights

Robert M. Bird, M.D., and the members of his Program Committee presented the physicians with an outstanding and unusual scientific program. The diversified program included discussions on crash survival, space medicine and radioisotopes in addition to excellent papers related to the every day practice of medicine.

Ten guest speakers addressed the scientific sessions of the meeting. They were Paul C. Aebersold, Ph.D., E. Grey Dimond, M.D., John W. Henderson, M.D., N. Frederick Hicken, M.D., Edward C. Holmblad, M.D., Perry B. Hudson, M.D., William T. Lhamon, M.D., William H. Masters, M.D., Theodore C. Panos, M.D., and Major David G. Simons, M.D.

At the House of Delegates meeting Sunday, May 6, the following officers were elected:

John F. Burton, M.D., Oklahoma City, President-Elect; Forrest Etter, M.D., Bartlesville, Vice-President; Wilkie Hoover, M.D., Tulsa, Delegate to the A.M.A.; E. H. Shuller, M.D., McAlester, Alternate Delegate to the A.M.A.; Clinton Gallaher, M.D., Shawnee, Speaker of the House of Delegates; J. Hoyle Carlock, M.D., Ardmore, Vice-Speaker of the House of Delegates.

The following Councilors were elected:

District 1, J. E. Highland, M.D., Miami, Councilor; L. B. Word, M.D., Bartlesville, Vice-Councilor.

District 2, Powell Fry, M.D., Stillwater, Vice-Councilor, to fill the unexpired term of Glen McDonald, M.D., who resigned.

District 4, Joe L. Duer, M.D., Woodward, Councilor, to succeed himself; C. A. Traverse, M.D., Alva, Vice-Councilor.

District 7, C. C. Young, M.D., Shawnee. Councilor; Paul Gallaher, M.D., Shawnee, Vice-Councilor.

District 10, Paul Kernek, M.D., Holdenville, Councilor, to succeed himself; C. D. Lively, M.D., McAlester, Vice-Councilor, to succeed himself.

District 13, John B. Miles, M.D., Anadarko, Councilor; Charles E. Green, M.D., Lawton, Vice-Councilor.

The following resolutions were among those adopted by the House of Delegates:

1. A resolution condemning the inclusion of the service of pathologists, radiologists and anesthesiologists under Blue Cross benefits was passed.

2. A resolution condemning the Veteran's Administration for treating patients covered by Workman's Compensation was passed. It was also resolved that members of the Association participating in such a program shall be guilty of unethical practice.

3. A resolution was passed opposing any increase in A.M.A. dues, as long as payment of these dues remains optional. Oklahoma, being one of only 18 state societies which makes A.M.A. dues compulsory, feels that any additional revenue should come from a greater total membership rather than an increase in dues.

This year's meeting offered the greatest number of exhibits in the history of the O.S.M.A., featuring fifty-eight Commercial Exhibits and forty-two Scientific Exhibits. A committee of judges, appointed to rate the Scientific exhibits, selected the VA and University Hospitals' exhibit, "Rehabilitation of the Handicapped," as the best of the show. Other winners were: Second place—"The Technique and Clinical Value of Needle Biopsy of the Liver." Presented by the Departments of Medicine and Pathology, Veteran's Administration Hospital and the University of Oklahoma School of Medicine. Third place (tie)—"Differential Diagnosis of Breast Tumors" and "Abdominal Aortography." Presented by Cancer Society and the Veteran's Hospital respectively.

A "Hubby Hobby Show" was held in the exhibit area of the Zebra Room. The eighteen hobbies displayed a great variety of talents and were quite popularly received. The enthusiastic response to the show indicates that more of such shows will be forthcoming.

A good time was had by all at the President's Annual Dinner Dance, Tuesday evening, May 8. Nearly four hundred physicians and their wives enjoyed dancing to the splendid music of the Ted Weems Orchestra. Prior to the dance, Dr. R. Q. Goodwin presented the gavel to Dr. H. M. McClure, Chickasha, the incoming president of the Association. Dr. McClure's inaugural address left little doubt that the reins of the Association remain in competent hands.

One of the most interesting highlights of the Annual Meeting was the Old Timers' Luncheon. Eighteen physicians who were members of the O.S.M.A. in 1906, at the time it was formed from the two territorial medical societies, were on hand to swap stories and renew old acquaintances. Many members of the Council were also present at this event and there is much talk about making it an annual affair.

Forty-two doctors competed in the Annual Golf Tournament which was held at Twin Hills Golf and Country Club on May 9. Although it was a very windy day, several good scores were recorded. Dr. P. B. Cameron, Pryor, and Dr. E. E. Cooke. Oklahoma City, tied with scores of 78. Dr. Ned Burleson, Prague, won the handicap with a score of 85.

Prizes consisted of a golf seat, travel clock, umbrella and several sport shirts.

Scores

P. B. Cameron, M.D., Pryor	78
E. E. Cooke, M.D., Oklahoma City	78
N. Burleson, M.D., Prague (handicap 16)	85
E. M. Stokes, M.D., Tulsa	80
P. B. Champlin, M.D., Enid	84
J. C. Amspacher, M.D., Oklahoma City	84
J. Gable, M.D., Oklahoma City	85
P. E. Russo, M.D., Oklahoma City	86

The fact that the Grand Old Opry was being held in the Municipal Auditorium simultaneously with the House of Delegates Meeting had little effect on attendance. To the contrary, it was reported that an elderly gentleman sat in the House of Delegates Meeting for several minutes before realizing that he was in the wrong room.

WE CORDIALLY INVITE YOUR INQUIRY for application for membership which affords protection against loss of income from accident and sickness (accidental death, too) as well as benefits for hospital expenses for you and all your eligible dependents.



Physicians of State Invited To Second Annual Symposium

The McAlester Clinic and McAlester Clinic Foundation announce the following program to be presented at their Second Annual Symposium August 4-5, 1956. The program is sponsored jointly by the clinic and the Department of Postgraduate Medicine, University of Oklahoma School of Medicine. Eight hours of Category I credit is allowed by the American Academy of General Practice. Program is as follows:

Saturday, August 4

12:30 *Registration*—Aldridge Hotel Lobby
Section I—Trauma—Old Hotel Ballroom; L. S. Willour, M.D., Presiding; Greetings, Announcements; *Invocation*—Dr. Lawrence Johnson.

1:45 *Pediatric Aspects of Trauma in Childhood*—T. Shuller, M.D.

2:05 *Chest Injuries, Treatment, Etc.*, Allen Greer, M.D.

2:35 *Treatment of Eye Injury and Infection;* Fred Switzer, M.D.

Coffee Break

Section II—Trauma, Con't.; H. C. Wheeler, M.D., Presiding

3:00 *Head Injuries, Treatment Early and Late;* Maurice Capehart, M.D.

3:30 *Burns;* Pat Fite, Jr., M.D.

4:00 *Fractures of the Elbow in Children;* Worth Gross, M.D.

Coffee Break

Section III—Cardiovascular Disease

4:40 *Panel Discussion* — C. K. Holland, M.D., Chairman; John J. Donnell, M.D., Cardiologist; Allen Greer, M.D., Chest Surgeon; Malcom Phelps, M.D., General Practice; Tom Gafford, M.D., Pathologist and Peter Russo, M.D., Radiologist

7:00 *Social Hour—McAlester Country Club* —Courtesy Pfizer Pharmaceutical Co. *Dinner*—McAlester Country Club—Courtesy McAlester Clinic; E. H. Shuller, M.D., Presiding; Malcom Phelps, M.D., Guest Speaker

9:30 Dance

Sunday, August 5

8:00 Golf Tournament — McAlester Country Club; *Fishing*—McAlester Lakes.

9:00 Coffee Hour at Clinic; Tour—McAlester Clinic Building.

9:45 *Clinical Section IV*—Main Reception Room—McAlester Clinic; Fred D. Switzer, M.D., Presiding

A.

1. Kirschner Wire Technique for Hip Pinning; E. H. Shuller, M.D., Bill Johnson
2. *Erythroblastosis and Exchange Transfusion;* Thurman Shuller, M.D.
3. *Gastroscopy and its Application;* C. K. Holland, M.D.
4. *Routine Operative Cholangiography;* Bruce H. Brown, M.D., George M. Brown, M.D.

9:45 B. *Cinema Clinic*—McAlester Clinic Library

10:00 1. *Film on Heart Disease*

10:45 2. *Film Diagnosis of Acute Abdominal Problems*

11:45 3. *Film on Bronchoscopy and Chest Anatomy Management*

Section V—Malignancy—Aldridge Hotel; S. L. Norman, M.D., Presiding

1:30 *Skin Lesions—Benign and Malignant;* Bruce H. Brown, M.D.

2:00 *Carcinoma of Lung;* Allen Greer, M.D.

2:30 *Malignant Change in Osteochondromias;* Worth Gross, M.D.

3:00 *Control of Pain: Neurosurgical Aspects;* Maurice Capehart, M.D.

3:30 *Coffee Break*
Section V — Malignancy, continued; Thurman Shuller, M.D., Presiding

3:40 *Malignancy of the Colon;* Joe Parker, M.D.

4:00 *Present Concept of X-Ray and Radium Treatment;* Peter Russo, M.D.

Coffee Break

Section VI
Panel—Massive Upper G.I. Tract Hemorrhage; George Brown, M.D., Presiding; C. K. Holland, M.D., Gastroenterologist; Peter Russo, M.D., X-Ray; Pat Fite, Jr., M.D., Surgery; Tom Gafford, M.D., Pathology and Joe Parker, M.D., Surgery

Exhibitors: Pharmacy and Supply—Aldridge Ballroom



Doctors also die

What would happen to your wife and your family if you should die tonight, Doctor? According to an article in the American Medical Association letter of October 18, 1955:

"Only one doctor in eight survives his wife."
"One out of three physicians left no will."
"Expenses of settlement of the estates studied ranged from a minimum of 13% to as much as one-third of the total estate."

These are startling figures!

Long years of hard work and self-denial characterize the building of a doctor's estate. This emphasis on work is perhaps unavoidable; but, nevertheless, has often resulted in the failure to plan the transfer of his estate to his wife and children.

We hope that the facts and figures we have pointed out do not pertain to you. However, if you have neglected the vitally important business of arranging for the transfer of your estate in the event of your death, our Trust Department will be happy to discuss this urgent matter with you immediately.

Now—today—call REgent 6-1531, and ask for our Mr. Scott. He will be happy to call on you at your convenience.



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Conference on Alcoholism To Be June 23-24 in Norman

For the first time in the history of the state, community action toward helping Oklahoma's 37,000 victims of alcoholism will be thoroughly outlined at an "Oklahoma Conference on Alcoholism" to be held June 23 and 24 at the University of Oklahoma.

Purpose of the two-day conference is to bring together all those concerned with alcoholism as it affects medicine, legislation, religion, industry, social work, the family and law enforcement. It is part of the Extension Division's summer schedule at the university, in cooperation with the Oklahoma Alcoholism Association. Sessions will be held in the air-conditioned Meacham Auditorium, and a small registration fee will be charged.

"While the two-week workshop being sponsored by the State Boards of Education and Health is directed toward public school teachers and formal education," Joe Mattox, executive director of the Association explained, "our conference will be open to all those concerned with the sick alcoholics who need proper understanding and treatment now."

The medical profession will be represented on the program by Dr. Louis Jolyon West, Director, Department of Psychiatry, U. S. Airforce, San Antonio, and Head of the Department of Psychiatry of the O. U. Medical School; Dr. Hayden H. Donahue, Director of the Oklahoma Department of Mental Health; Dr. Stewart G. Wolf, Head of the Department of Medicine, University Hospitals; Dr. Kirk T. Mosley, Chairman of Preventive Medicine and Public Health, University Hospitals; Dr. Nello Brown, a general practitioner of Oklahoma City who is a member of the Board of Directors of the Oklahoma Alcoholism Association; and Dr. A. A. Hellmans, Head of the Department of Psychiatry, Oklahoma State Health Department.

Four nationally recognized out-of-state specialists in the field of alcohol education also will participate in the sessions. These will be Raymond G. McCarthy, A.M., Ed. M., Associate Director, Yale University School of Alcohol Studies, Director of Alcoholism Research, New York State Commission, the author of numerous works on the subject of alcoholism.

Mr. Lewis W. Andrews, Executive Director of the Kansas State Commision on Alcoholism and lecturer on the National States Conference on alcoholism.

H. Frederick Kilander, Ph.D., Director of Health Education, New York University, and Director of the Alcohol Education Workshop for Teachers, O. U. Summer School.

Mr. David M., Special Assistant, E. I. duPont de Nemours & Company Medical Division Alcoholism Rehabilitation Program, a recovered alcoholic who has helped correlate the approach of top management with the views of medicine in a large corporation.

Others who will be on the program are Stanley Clifton, Ph.D., Head of the School of Social Work, University of Oklahoma, and contributing author to the Yale Journal on Alcohol; Dr. Oliver Hodge, Ed. D., State Superintendent of Public Instruction and President of the State Board of Education; Waldo E. Stephens, Ph.D., President of the Oklahoma Alcoholism Association; Mr. E., Alcoholics Anonymous; and Mrs. R., wife of an alcoholic.

"Speakers have been chosen on the basis of ability to present factual, understandable information about alcoholism and what is being done elsewhere to reduce its toll," Mattox said. "It's a disease—not a moral issue —and its control actually is a public responsibility."

According to Mattox, Oklahoma is one of only five states without a program for treating alcoholism as a public health problem. The state has not yet enacted legislation for care and treatment of sick alcoholics.

The Oklahoma Alcoholism Association was activated last December to promote a better understanding of the illness. It is a nonprofit health agency affiliated with the Medical Research Foundation in Oklahoma City. Its officers are Dr. Waldo E. Stephens, President; Prissy Thomas Black, Vice-president; Hugh G. Payne, Secretary-treasurer.

Newly elected to its Board of Directors is Dr. C. E. Northcutt of Ponca City, past president of the Oklahoma State Medical Association.

Watch your local newspaper for the conference schedule.

clinically proved in many common infections[1-60]

Hemolytic streptococcal infections

Pharyngitis/Tonsillitis/Sinusitis
Otitis media/Mastoiditis
Scarlet fever/Lymphadenitis/Erysipelas

Staphylococcal infections/Pneumococcal infections/Gonococcal infections/Vincent's Infection/Prevention of streptococcal infection in individuals with a history of rheumatic fever/Prevention of secondary infection due to penicillin-susceptible organisms

in dosage of just 1 or 2 tablets t.i.d.

and is far less costly than other penicillin salts

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SQUIBB 200,000 UNIT BUFFERED PENICILLIN G POTASSIUM TABLETS

Recommended dosage: 1 or 2 tablets t.i.d. without regard to meals. Bottles of 12 and 100.

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Deaths

L. C. KUYRKENDALL, M.D.
1885-1956

L. C. Kuyrkendall, M.D., former President of the Oklahoma State Medical Association, died March 27 at the Mayo Clinic, Rochester, Minn. where he had been hospitalized for about two weeks.

Doctor Kuyrkendall began his practice in McAlester after graduating from the St. Louis University Medical School in 1910. He was born at Leonard, Fannin County, Texas. During World War I, he served as a first lieutenant in the medical corps and continued as an officer in the reserve, being discharged in 1940 as a major.

In addition to his active medical career, he was a past commander of the American Legion, a past president and past district governor of the Lions Club, a member of the First Baptist church, chamber of commerce, and McAlester Country Club. He began his Masonic career in 1912 and helped organize the band several years ago. He was a 33rd degree Mason and was a member of the York Rite Bodies of McAlester, Bedouin Shrine at Muskogee and Sojourners club, McAlester.

T. L. SEABORN, M.D.
1876-1956

T. L. Seaborn, M.D. died at his home in Ada March 19.

Doctor Seaborn had practiced medicine in Indian Territory and Oklahoma since 1903. He received a 50 Year Pin in 1954. He had been in ill health since Thanksgiving.

He is survived by his widow, and two daughters.

FRANK H. SISLER, M.D.
1887-1956

Frank H. Sisler, M.D., Bristow, died April 7 following a stroke he had suffered the day before. He was in active practice and had visited patients in the hospital earlier in the day.

He was born May 16, 1887, in Stuartstown, W. Va., and came to Oklahoma in 1926. He had practiced in Bristow since that time with the exception of one year when he practiced in Tulsa. He was a member of the Masonic lodge and First Methodist church.

Survivors include his wife, two sons, a brother and three sisters.

OMER C. COPPEDGE, M.D.
1879-1956

Omer C. Coppedge, M.D., pioneer Bristow physician, died April 6 in an Oklahoma City hospital following a long illness.

Doctor Coppedge was a native of Verona, Mo. He came to Bristow in 1902. He was honored at a banquet given by Bristow physicians several months ago for his long and outstanding service. He was a 32nd degree Mason.

Survivors include the widow of the home, a son, Orville Coppedge, M.D., and a daughter, Mrs. Lenore Woodside, and a brother, O. F. Coppedge, M.D.

W. P. JENKINS, M.D.
1880-1956

W. P. Jenkins, M.D., long time Okfuskee County phyisician, died March 17. He had been in failing health for almost a year.

Doctor Jenkins was born in Flippen, Ark., and graduated from Arkansas University School of Medicine in 1912. He moved to Okfuskee County in 1917.

Survivors include five daughters and six sons.

VANCE MORGAN, M.D.
1910-1956

Vance Frederick Morgan, M.D., Harrah, was killed in an automobile accident April 13.

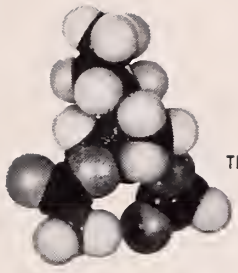
Doctor Morgan lived in Midwest City but maintained an office in Harrah. His wife, a daughter, three brothers and two sisters survive.

LESLIE WESTFALL, M.D.
1880-1956

Leslie Westfall, M.D., who retired from the active practice of medicine in 1952, died March 21 in an Oklahoma City hospital.

Doctor Westfall was born in Montmornenci, Ind. and graduated in 1901 from Purdue University. He received his medical degree from the University of Pennsylvania in 1905 and moved to Oklahoma City in 1908. He was professor emeritus of ophthalmology at the University of Oklahoma School of Medicine. Doctor Westfall was a past president of the Oklahoma City Academy of Medicine, a member of the Men's Dinner club, Lotus club, Chamber of Commerce and Presbyterian church.

(Continued on Page 232)



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DEATHS

(Continued from Page 230)

J. E. TOMKINS, M.D.
1868-1956

J. E. Tomkins, M.D., Yukon, died at his home March 22.

Doctor Tomkins, who retired in 1955, was honored at an appreciation day in that city in 1952. Doctor Tomkins graduated from McGill University in Montreal, Canada, in 1893. He came to Yukon in 1907.

His wife, a son, and three daughters survive.

ALTON J. WEEDN, M.D.
1907-1956

Alton J. Weedn, M.D., owner and operator of the Weedn Hospital in Duncan, died April 26. He had been ill for about a year.

Doctor Weedn was born at Sasakwa, Okla. and moved to Duncan in 1919. He was graduated from the University of Oklahoma School of Medicine in 1935.

In addition to his medical activities, he was a member of the First Christian Church, Duncan Rotary Club and Delta Tau Delta social fraternity.

His wife, a son, his mother and two sisters survive.

IN MEMORIUM

A "No Vacancy" sign, in brilliant Neon lights, might well have hung above the First Christian Church in Duncan the Sunday we gathered there for the Memorial Service for Dr. Alton Weedn. This church of Doctor Weedn's elected religious faith, has no small auditorium, but one of much larger capacity would not have accommodated the people who had come to say farewell to one of their best friends, their Doctor, and their fine fellow-citizen.

The beautiful casket, in which his body was to be carried to its final resting place, was completely banked with flowers, which spread to cover the entire end of the sanctuary, and represented the sincere sentiment of the many families he had served so faithfully over the past many years.

I knew Doctor Weedn before he entered medical school and I enjoyed his friendship up to the time of his death. He counseled with me on many occasions, and at such times I learned to know his worth to his community and to his patients. We all know of the unparalleled service he gave to the Duncan area and of his responsibilities in connection with the hospitals in Duncan and Marlow, left to his management by the untimely death of his father. We all know how hard he worked. Had he not met his responsibilities with so much of his energy, such a memorial service might not have been necessary at such an early age. He lived a busy, glorious life of service, undoubtedly just as he preferred to live it, because he worked many months after he should had have given his broken body a rest. He loved his work, and his loyalty to his patients will long be remembered.

The beautiful service, conducted by Rev. Roy Harp, was just as Alton would have chosen it. Familiar songs, appropriate scriptures, and a sincere memorial sermon were followed by the procession of men, women, and children who had come to bid their friend and physician a personal farewell. Individuals from every walk of life made up the almost endless column of saddened people. Professional men, executives, oil field workers, farmers and ranchers, negroes and white alike passed in silent review.

After some twelve hundred people had moved down the aisle of his church home, one realized that many had been standing outside, some with ears at the doors, some with eyes at the windows, all wanting to join in the words of praise of the "little Doctor."

Dr. Alton Weedn is dead. Everyone who knew him mourns his death. Our State has lost a good doctor. You and I have lost one of our finest friends, and Duncan has lost also an outstanding citizen. Everyone in his community recognizes the unexcelled service he always gave them. All that is good in Duncan was in some way benefitted by his assistance. His inability to refuse a call to duty, be it professional or a community cause, undoubtedly contributed to his untimely death. A marble monument may mark his grave, but his real memorial exists within the minds and hearts of his fellowmen, who will never forget him. The lives of a great many people were made brighter because of Dr. Alton Weedn. Who could ask for a better epitaph!

Ed. Note: While Doctor Kelso has strayed from objective reporting for a scientific journal, his subjective description should renew our faith in the real destiny of the Doctor.



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[1]Albertson, H.A. and Trout, H. H., Jr.: *Antibiotics Annual* 1954-55, Medical Encyclopedia, Inc., New York, N.Y., 1955, pp. 599-602.

[2]Prigot, A.; Whitaker, J. C.; Shidlovsky, B. A., and Marmell, M.: *ibid*, pp. 603-607.

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PHYSICIAN PLACEMENT

The following physicians have expressed a desire to locate in Oklahoma. To the best of our knowledge, the names, addresses, qualifications and availability are current and accurate.

The asterisk beside some names indicates that additional information concerning the physician is available in this office.

Anesthesia

*Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

*Allen J. Alderman, 1104 Lincoln Drive, Great Falls, Mont., age 28, University of Nebraska, 1954, available upon release from active duty, July 1, 1956.

*Charles Dail Davenport, 814 N. Elm, Hoisington, Kansas, age 30, University of Oklahoma School of Medicine, 1953, veteran, available July, 1956.

*Jack D. Honaker, 135 Notre Dame Dr., San Antonio, Texas, age 28, University of Oklahoma, 1953, presently completing military obligation, available July 1, 1956.

*John V. Hume, 931 W. 15, Pueblo, Colo., age 31, University of Colorado 1953, residency in general practice, veteran, availability unknown.

*Elmer D. Peffly, Capt., USAF (MC) Aviation Medical Examiner, 3545th USAF Hospital, Office of the Flight Surgeon, Goodfellow Air Force Base, Texas, age 34, University of Oklahoma School of Medicine, 1953, interned at Wesley Hospital, Oklahoma City, available July, 1956.

*Wilmer G. Sheldon, 32 Williams, S. E., Minneapolis, Minn., age 33, University of Minnesota, 1955, veteran, available upon completion of internship, July, 1956.

Internal Medicine

*McCague Beardsley Copeland, Henry Ford Hospital, Detroit 2, Mich., age 30, University of Colorado, 1952, in residency at Henry Ford Hospital, veteran, available July 1, 1956.

*C. A. Loughridge, 1107 E. Upsal St., Philadelphia 19, Pa., age 36, College of Physicians and Surgeons, Columbia University 1954, in internal medicine residency at Philadelphia General Hospital, available between July and September, 1956.

*James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Orthopedics

Robert E. Landstra, American Legion Hospital for Crippled Children, 2350 Lakeview Ave., St. Petersburg, Florida, age unknown, now in orthopedic residency training, availability unknown.

Pathology

*Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, George Washington University, 1950, will finish four years pathology residency in January, 1957, will consider immediate placement if board requirements are not necessary.

Pediatrics

*David Goldstein, 66 Lafayette Ave., Staten Island 1, N. Y., age 38, Long Island College of Medicine, 1949, two year residency in pediatrics, Board certified, available after Oct. 1, 1956.

*Robert E. Gustafson, 611 Beckman Dr., Kankakee, Ill., age 36, University of Iowa, 1945, Board certified and Fellow of the the American Academy, would like to locate where he can practice and teach pediatrics, veteran, availability to be discussed.

*Leslie W. Langley, Jr., 1709 De Pauw Ave., New Albany, Ind., age 32, University of Louisville School of Medicine, 1953, now taking second year of pediatric residency, veteran, available July 1, 1956.

*Carl Frederick Wagner, 130 E. Shields, Cincinnati 20, Ohio, age 48, University of Cincinnati, 1935, interned University Hospital of Cleveland and served residency at Cincinnati, 1935, veteran, prefer clinic or associate, available May 1, 1956.

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Surgery

*Albert Frederick Cunningham, U. S. Naval Hospital, Memphis, Tenn., age 35, University of Arkansas, 1947, available April 15, 1956.

*Edward Wendell Foster, 147 W. Main, Meriden, Conn., age 62, Harvard University School of Medicine, 1924, certified by specialty board, veteran, available now, would consider surgery, obs.-gyn., or general practice.

*Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available Jan. 1, 1957.

*C. Richard Jernigan, Parkland Memorial Hospital, Dallas, Texas, age 29, Southwestern Medical College 1948, will be Board qualified in General Surgery January 1, 1956, veteran, available January 1, 1956.

*Arthur Andrews McMurray, 3203-B Cherrywood, Rd., Austin 2, Texas, age 35, University of Tennessee, 1950, Board eligible in general surgery, veteran, available July, 1956.

*Boyd M. Saviers, 514 Lacewood Dr., Dallas, Texas, age 33, University of Oklahoma, 1947, finishing third year residency at Methodist Hospital of Dallas, veteran, available September, 1956.

*Richard A. Walsh, 1363-C Angel Alley, Fort Knox, Kentucky, age 31, New York University, 1948, Board eligible, presently completing military obligation, available July 1, 1956.

Urology

*Harry Emanuel Fisher, Jr., Box 161, Barnes Hospital, St. Louis 5, Missouri, age 33, University of Oklahoma, 1952, veteran, available July 1, 1956.

Woodrow Payne, M.D., 764 McConnell, Memphis, Tenn., age 34, University of Tennessee, 1944. Board Qualified in Urology, veteran, available July, 1956. (Wants city 20,000-75,000 — private proup, partnership).

*Henry Ernest Wolfe, Jr., 879 Rosewood Ave., Vallejo, Calif., age 34, Albany Medical College, 1947, board qualified in urology, available upon separation from active duty, Aug. 15, 1956.

W. Y. Cook, M.D., intern at St. Anthony Hospital, Oklahoma City. Available July 1 until October.

Locum Tenens

William Grant Blanchard, 719 Tesler Way, Seattle, Washington, University of Oklahoma, 1955, completing internship King County Hospital, would like employment prior to service, possibly six-twelve months.

B. N. Shockley, 2009 N. Pearson Dr., Midwest City 10, Oklahoma, age 27, Marquette University, 1952, will be available for seven months beginning November, 1956, or can work for a 30 day period any time prior to November.

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Book Reviews

HAND SURGERY IN WORLD WAR II, Office of the Surgeon General, Department of the Army, Washington, D. C. 1955 (published by U. S. Government Printing Office, $3.75).

This volume, entitled SURGERY IN WORLD WAR II—HAND SURGERY is the first of a series to be published by the Medical Department of the United States Army, from the office of the Surgeon General. It is a record of the hand surgery which was carried out in the Army during the last war, and emphasizes the emergence of hand surgery as a specialty during this period. Through the efforts of General Kirk, then Surgeon General, hand injuries were declared to be a special group, and centers were set up to handle them.

Dr. Sterling Bunnell, internationally recognized dean of hand surgeons, was appointed as Civilian Consultant for Hand Surgery to the Secretary of War, and is the editor of this volume.

He assisted in setting up nine hand centers in the United States, in conjunction with plastic surgery centers. The men picked to be in charge of and do the work in these centers in 1945 were surgeons known to Doctor Bunnell to have had experience and interest in surgery of the hand. This group included Doctors Lot G. Howard, William H. Frackelton, Arthur J. Barsky, George S. Phalen, Donald R. Pratt, James W. Littler, Walter G. Graham, Samuel B. Fowler, and Gilbert L. Hyroop, all of whom were officers in the Medical Corps.

When this book was in preparation, each of the above men were asked to write a report describing the organization and workings of the Hand Surgery Section of which he was in charge. Chapters written by the late Dr. Harvey Allen, Doctor Mather and Doctor Allen were also included.

Doctor Bunnell himself included a chapter on conclusions on the care of injured hands in World War II in the Zone of the Interior, derived from his experience as Civilian Consultant for Hand Surgery to the Secretary of War. This chapter gives a concise, comprehensive picture of the scope of hand surgery. In fact, the book can be of considerable value as a reference book for hand surgeons. It contains many excellent illustrations and has a good index.—Gilbert L. Hyroop, M.D.

ATLAS OF PLASTER CAST TECHNIQUES. E. E. Bleck, M.D. The Year Book Publishers, Inc., Chicago, Ill.

This attractively bound pictorial Atlas is an excellent manual for plaster techniques. The binding is such that the pages can be readily folded open and left for observation during application of cast. The principles of the use of plaster of paris and method of application of various types of casts and pitfalls for the unwary, are carefully shown and illustrated.

Each one familiarizing himself with the use of plaster of paris will of course, develop certain techniques of his own, but careful study of this Atlas suggests that one could do well to follow Doctor Bleck's technique in its major particulars. I think the Atlas should be highly recommended to the intern, the orthopedic resident and most particularly to the physician in general practice. It should be an extremely useful addition to the plaster room of the non-orthopedic hospital where utilizations of plaster techniques may become necessary for those who are not working in this medium every day.

The book is on glossy paper, the cuts are clear and very self-explanatory. It runs to 120 pages with several hundred illustrations with a minimum of text.—Don H. O'Donohue, M.D.

A MANUAL OF FRACTURES AND DISLOCATIONS. Barbara Stimson. Lea and Febriger. 1956. 225 pages.

This rather brief manual of treatment of fractures and dislocations contains a wealth of very worthwhile information. The author has no hobbies to ride and proceeds to give a very concise and yet quite inclusive discussion of more common injuries, particularly of extremities. The early section on Classification is interesting and instructive. The section on Bone Repair is of course,

(Continued on Page 242)

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Book Reviews

(Continued from Page 240)

rudimentary but contains the essentials necessary for a student or General Practitioner. The section on Principles of Treatment, while brief, is also instructive. There are few points where one can argue with the author about her description of treatment since she sticks very well to standardized techniques and pretty well follows the concensus. One must, of necessity, differ to some small degree. I think her recommendation for treatment of the fractured patella is perhaps too conservative, giving patellectomy too small a part. Perhaps of more significance is her recommendation for treatment of bimalleolar fractures of the ankle and so-called "Pott's fracture." I think most Orthopedists would feel that a far greater per cent would require open reduction than is indicated in this book. On the other hand, her recommendation for diagnosis and treatment of Colles' fracture is excellent. That of treatment of elbow fractures in children is unusually good in so concise a work.

In summation, I would say that this is an extremely valuable book and is of pocket size. It should heartily be recommended to the medical student and intern and to the physician who is not doing a large practice in treatment of fractures, but is nevertheless called upon to treat or recommend treatment in a certain number of cases through the years. I think this book has a very valuable place and is in many respects superior to many of the other manuals. This is a Third Edition and I think a big improvement on previous works.—Don H. O'Donoghue, M.D.

BOOKS RECEIVED

The following books have been received by the *Journal* office. As space permits and the context warrants, books will be reviewed.

BELLEVUE IS MY HOME. Salvatore R. Cutolo, M.D., with Arthur and Barbara Gelb. Doubleday and Company, Inc., Garden City, New York. 1956. Price $4.00.

THE ROCHESTER REGIONAL HOSPITAL COUNCIL. Leonard S. Rosenfeld, M.D., M.P.H. and Henry B. Makover, M.D. Published for The Commonwealth Fund by Harvard University Press, Cambridge, Mass. 1956. Price $3.50.

THE TRUTH ABOUT CANCER. Charles S. Cameron, M.D. Prentice-Hall, Inc., Englewood Cliffs, New Jersey. 1956. Price $4.95.

THERAPY OF FUNGUS DISEASES, An International Symposium. Edited by Thomas H. Sternberg, M.D. and Victor D. Newcomer, M.D. Little, Brown and Company, Boston, Toronto. 1955. Price $7.50. Sent to the *Journal* with the compliments of E. R. Squibb and Sons.

HUNTERDON MEDICAL CENTER, The Story of One Approach to Rural Medical Care. Ray E. Trussell, M.D., M.P.H. Published for the Commonwealth Fund by Harvard University Press, Cambridge, Mass. 1956. Price $3.75.

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Editorials

Antibiotic-Resistant Bacteria And Respiratory Infections

That the development of resistance to the various chemotherapeutic drugs would become a problem has been evident from the start. A number of recent communications have reviewed various aspects of this subject. Indeed, it was early noted that the usefulness of the sulfonamides in certain prophylactic programs for beta-hemolytic streptococcal infections was limited by the appearance of resistant strains. As each new antibiotic has been introduced and it has been more widely used, certain bacterial species have shown an increasing proportion of strains resistant to that drug. Abundant reports are available in the literature concerning the difficulties in the management of tuberculosis, urinary tract infections, and certain gastrointestinal disturbances of iatrogenic origin such as staphylococcal enterocolitis following intensive treatment with broad-spectrum antibiotics.

Why has this problem arisen? The precise mechanism for the "development or emergence" of antibiotic-resistant bacteria are not completely understood. Bryson and Demerec[1] have summarized the recent knowledge on this subject. They state that the main factor may be spontaneous mutations in bacterial cells leading to altered cellular biochemical processes and hence "antibiotic resistance." But it is also evident that some bacterial species are neither uniformly sensitive nor resistant. In these instances the development of a predominantly resistant bacterial population is due to the lethal effect of the chemotherapeutic drugs on the initially predominantly sensitive populations, with the subsequent persistence of the resistant strains.

It is evident from clinical practice, as well as from the literature, that resistant bacteria may pose serious problems in the management of tuberculosis, urinary tract infections, and superimposed or secondary gastrointestinal disturbances. Is there any evidence that some of these same problems have developed in relation to respiratory tract infections? The answer to this question is unequivocally *Yes*, as so ably reviewed by Finland.[2] The medical literature is replete with references to the widespread problem of antibiotic-resistant staphylococcal infections. This has been largely a concentrated problem in hospital populations, as evidenced for example by the marked increase in resistant staphylococcal strains isolated from hospitalized patients whether they have received any antibiotic or not, and from the increased percentage of recovery of such strains from the nasopharynx of asymptomatic hospital personnel. There is little doubt that these antibiotic-resistant staphylococci have been important as the etiologic agents in superimposed infections occurring during courses of antibiotic therapy and as secondary invaders in other instances.[3] The importance of this problem was pointed out soon after the introduction of the broad-spectrum antibiotics, and when bacteriologic examinations are employed that seek the cause of such respiratory tract superinfections, they are found all too frequently.[4]

Inasmuch as the development of resistant tubercle bacilli is so widely understood, it is unnecessary to discuss that particular respiratory tract infection further. Suffice to say, however, that in the management of this disease, we have succeeded in gaining considerable information concerning desirable therapeutic regimens designed to avoid the development of resistance by appropriately combined antibacterial therapy. These principles have often guided the selection of antimicrobials in other infections which have also often been associated with the development of resistant organisms.

Virtually all of the available chemotherapeutic agents will produce changes in the bacterial flora of the respiratory tract. These changes have most often been in the suppression of gram-positive organisms, with a subsequent increase in the proportion of gram-negative bacteria or resistant gram-positive species, and particularly when large doses of these potent agents are administered parentially. The sensitive strains of gram-positive organisms are usually eliminated

during the period of antibiotic administration, at least as far as the culture is concerned, but may reappear after cessation of the drug.[5] The less sensitive species, such as *H. influenzae, Str. viridans, Klebsiella pneumoniae*, certain Neisseria species, staphylococci, and certain gram-negative organisms, may flourish abundantly. Most often these merely reflect a change in the "normal" flora, but their potential relationship to secondary invasion and superinfection cannot be overlooked when they are noted on cultures. A change in therapy may be necessary when this situation occurs, but such a change must reflect good clinical judgment as to whether the resistant organism is presumably present as a "resident" or as a "pathogen".

Fortunately, the various prophylactic programs employing small doses of oral penicillin or other chemotherapeutic agents have not resulted in significant changes in the antibiotic flora of the respiratory tract. When the broad-spectrum antibiotics are used, however, either in the therapy of acute infections or in prophylaxis, or when multiple antibiotic therapy is given for either viral or bacterial respiratory tract infections, usually a more resistant bacterial population may be expected to follow. Occasionally also fungi, especially *Candida albicans* (Monilia), will be recovered from appropriate cultures and may be etiologic in superinfections of the upper and lower respiratory trees. Here too, appropriate therapy should be instituted early. Cessation of the offending drug is far more important, it appears, than specific anti-fungal therapy.

The problem of antibiotic resistance and respiratory tract infections is less serious generally than in certain other infections, but it is nonetheless present and must be recognized immediately, since the consequences may be more severe than in the incorrect therapy of other infections. Sufficient evidence exists to support the belief that the vast majority of respiratory infections respond adequately to penicillin, and to penicillin alone (providing the patient can take that drug), and that the use of excessively large doses of penicillin, the routine employment of broad-spectrum antibiotics, or the injudicious use of certain combinations of antibiotics not only may increase the likelihood of antibiotic-resistant respiratory tract infections but may impede the effectiveness of the therapy of the initial infection. The necessity of making frequent cultures of the respiratory tract is implicit, for the appearance of these resistant species and the determination of their antibiotic sensitivities is of the greatest urgency in effecting a cure of the superinfection.—T.H.H.

REFERENCES

1. Am. J. Med. *18*:723, (May), 1955.
2. New England J. Med. *253*:909, 969, 1019, (Nov., Dec.), 1955.
3. New England J. Med. *253*:201, 1955.
4. Ann. Int. Med. *35*:1175, 1951.
5. Antibiotics & Chemother. *4*:829, 1954.

Frontiers of Science

Doctor MacVicar, on leave from Oklahoma A. and M. to serve as Executive Secretary of the Frontiers of Science, has described (page 251) the problem of education of young people for a scientific career under our present high school program. The physician in the small community must take the lead in improving the educational possibilities of the gifted child.

The problem is deeper than inadequate facilities for courses leading to a career in science. In fact a technologic race with Russia without the development of man himself in America would pit one robot against another. The fact that we are humane now is not impressive if one looks back only a few years and sees witch hunts, slavery in the South and a worse sweat shop slavery in northern industrial plants. Who put the Cherokees, men, women and children in concentration camps and forced them to march hundreds of miles?

Einstein once remarked that one drawback of democracy was that it brought mediocrity to the top. This theme is beautifully developed in a speech entitled "The Fifth Freedom" by the Headmaster of the Choate School which states in part—" . . . and yet here we are on the brink of forfeiting all of our freedoms because of losing the fifth: the *freedom to be one's best.*

"*The freedom to be one's best:* Does not everyone have it? De St. Exupery speaks of an Arab child, whom he saw wandering free in the streets of a North African town, as a lost Mozart; he would never be trained or developed. All his music would die within

(Continued on page 268)

Scientific Articles

Basic Fluid and
ELECTROLYTIC BALANCE

VIRGIL RAY FORESTER, M.D.

THE AUTHOR

Virgil Ray Forester, M.D., an Oklahoma City physician whose specialty is Gastroenterology, has written an article on "Electrolyte Balance." Doctor Forester was graduated from the University of Oklahoma School of Medicine and did his post graduate work at the University of Pennsylvania Graduate School.

It shall be the scope of this paper to present the basic factors which have to do with fluid and electrolytic adjustment.

For over a hundred years it has been common knowledge that supportive therapy of the ill patient is of major importance. Only in the past few years has a scientific approach been developed. It is unfortunate, however, that other than a cursory advance, the knowledge of body fluids and electrolytic management is still deep in the mire of unfinished research.

However, even now we cannot help but be as amazed as were those men who first forced saline into the veins of the cholera victim and watched the miraculous change from death to life take place.

The following is an exerpt from a letter written by a Dr. Latta to the secretary of the central board of health in London, May 23, 1832.[1]

"A female, aged 50, very destitute, but previously in good h e a l t h , was on the thirteenth instant, at 4:00 a.m., seized with cholera in its most violent form, by half past nine was reduced to a most hopeless state. The pulse was quite gone, even in the axilla, as strength was so much exhausted, that I had resolved not to try the effects of the injection,—I at length thought I would give her a chance,—I injected 120 ounces, (saline in solution), when like the effects of magic, instead of the palid effect on one whom death had sealed as his own, the vital tide was restored and life and vivacity returned."

It might be said, that there are two types of patients which are dealt with in replacement therapy. One is the ill patient who is able to take food and liquids by mouth, and whose eliminative processes are functioning normally. The second is one who is not able to take food and liquid by mouth and whose eliminative processes are not functioning normally.

The oral intake of food and drink is always the best route of replacement. If the eliminative processes are functioning normally there will be an adequate disposal of the waste products of metabolism.

In most instances the ill patient has no great appetite for food, and usually will not take sufficient amounts of water to overcome that lost in the sweat, respiration, feces, and urine. It is not usual for these individuals to develop a severe imbalance, but in such instances where perspiration is profuse, the temperature elevated, and the body metabolism going on at a more rapid rate, difficulty can occur. Therefore, output records should be kept even though the orders on the chart state that fluids should be forced. It is seldom thought of but some notice of the amount of food taken should become a matter of record, so that the physician may have some insight as to the sustenance of his patient.

It is the patient who is unable to, or will not, take fluids and food orally, who presents a serious problem in management. Complications are sure to arise. It is in this situation that a full understanding of the physiology of fluid and electrolytic metabolism becomes a necessity.

1. Presented before the Washington Birthday Day Clinic.

The obligatory losses in these patients via the skin, lungs, urine, and feces continue. The frequent necessity of a levine tube in the stomach through which a constant aspiration of its contents is being taken add to the difficulties. The presence of severe diarrhea or vomiting will increase the fluid losses markedly and add greatly to the difficulties. From whatever route the loss may arise, there is a continual associated loss of electrolytes as well as water. These must be replaced if the patient is to live.

For reasons of simplification the fluid and electrolytes of the body are divided into compartments. There are two major divisions, these being the extracellular and the intracellular. The extracellular compartment includes the vascular and interstitial spaces.

The fluid content of these various compartments is not static. The greater part of the fluid and the electrolytes contained therein are excreted into the gastrointestinal tract and re-absorbed therefrom. The fluid of the extracellular compartment manifests the largest turnover in comparison with that of the intracellular compartment; and also, these changes can take place much more rapidly. This re-absorbable fluid amounts to between 3,000 and 8,000 milliliters per day.

In dealing with electrolytic and water replacement therapy, we must change our objectives in reference to clinical measurement. The electrolytes are of physiological importance, not because of their weights but by virtue of the number of particles in solution. A definition of an electrolyte is "any substance which in solution conducts an electrical current and is decomposed by it." If we measure the quantity of electrolytes as milligrams percent we are referring to their weight in reference to their volume. Chemical substances do not react with each other in relation to the amount of their weight for weight. Rather, they react in relation to their equivalent weight. When the concentration is expressed in milliequivalents we are referring to the number of reacting particles or ions in relation to their volume. If the housewife wanted to know how many vegetables she had in her shopping bag she would have difficulty if she added the weight of the peas to the weight of the watermelon.

For this purpose the milliequivalent is used. A milliequivalent is one one-thousandth of an equivalent weight and an equivalent weight is that weight of an element or compound which has the combining or reacting value equal to a gram atom of hydrogen ion. Therefore, when a concentration is expressed in milliequivalents we are referring to the number of reacting particles or ions in relation to their volume.

Milliequivalents per liter may be calculated from milligrams percent by the following formula:

$$\frac{\text{milligrams percent} \times \text{valence} \times 10}{\text{atomic weight}} = \text{milliequivalents per liter}$$

However the use of conversion factors for the principal body ions as shown in Table 1 will save considerable time in calculation.

Oftentimes reference will be made to molar solution. A molar solution contains 1 mole of a molecular substance per liter. A millimole is one one-thousandth of a mole. Molar solutions refer to the concentrations of particles in a solution. Milliequivalents refer to the acid-base neutralizing potential of the particles in solution.

The concentration of the electrolytes in solution have a direct bearing on the osmotic pressure pertinent to the various fluid com-

ION	IONIC WEIGHT GM.	EQUIVALENT WEIGHT GM.	CONVERSION FACTORS MEQ. LITER	MG%
Na^+	23.0	23.0	mg.% × .435	mEq./l. × 2.30
K^+	39.1	39.1	mg.% × .256	mEq./l. × 3.91
Ca^{++}	40.1	20.0	mg.% × .498	mEq./l. × 2.00
Mg^{++}	24.3	12.2	mg.% × .823	mEq./l. × 1.21
Cl^-	35.5	35.5	mg.% × .282	mEq./l. × 3.55
HCO_3^-	61.0	61.0	vol.%(CO_2) × .45	mEq./l. × 2.22 (vol.%)

TABLE 1. Conversion for Principal Body Ions

partments previously mentioned. The osmotic pressure exerted by a chemical in solution is measured in osmols. One gram atomic weight of a electrolyte equals one osmol or one one-thousandth milliosmols.

As I have come to understand the problem, it does not particularly matter as to how the fluid and electrolyte is lost, the end result is the same. A state of dehydration and electrolyte is lost, the end result is the same. A state of dehydration and electrolytic imbalance takes place. It is true that the type of electrolytic and fluid loss may vary as for example there would be considerable difference between the electrolytes lost in vomitus in reference to those lost in diarrheal states. It seems obivous, then, that treatment should be directed to the patient and not to the source, for if therapy is indicated it is usually an emergency.

In reference to the proper treatment of patients, I believe Mudge's[2] statement should be the first consideration one should have. He states "the first objective is to make the patient better, the second is to make him chemically normal." When an abnormal value for the volume of the serum sodium or the serum potassium is reported, too often the question is asked "how are we going to get him back to normal?" The first question should be "what harm is this going to do the patient?" Consequently, a careful consideration of the following three factors must be made.

First is, what is the state of the fluid volume? This has primarily to do with water content in the extracellular compartment, for it is here that we are first able to evaluate deficiencies. To diagnose a water deficiency, such aids as an hematocrit evaluation and determination of urinary concentration are of help. However, neither of these are specific in a strict sense. For the most part we must rely on a clinical evaluation of the patient. If it is found that there is a definite volume of deficiency, care must be exercised in determining the amount necessary for replacement. Hardy[3] believes that the following rule based on the clinical examination of the patient gives an easier access to the problem.

Mild dehydration—deficit equals 4 per cent of body weight.

Moderate dehydration—deficit equals 6 percent of body weight.

Severe dehydration—deficit equals 8 per cent of body weight.

In practice, he advises that it is best not to give more than 5 liters during the first 12 hours of therapy regardless of the apparent severity of dehydration or the weight of the patient.

The second consideration is what is the osmol concentration. As has been previously mentioned, the osmolar concentration has to do with the number of particles in solution. Changes here will vary the osmotic tension of the various fluid compartments. In other words, is the patient's extracellular fluid isotonic, hypertonic, or hypotonic? Because 90 percent of the ions of plasma and other body fluids are monovalent, fairly accurate evaluation can be made by taking the sum of the total serum chloride and the CO_2 combining power (in mEq.) which will equal the osmolar concentration. Normal values are as follows: The serum chloride ion concentration is 103 mEq/L; the bicarbonate space contains 27 mEq/L; and the sum of these two factors is appreciably less than 125 mEq. per liter sufficient hypo-osmolarity or hypo-tonicity of the extracellular fluid exists; if the sum is greater than 135 mEq. hyper-osmolarity or hyper-tonicity of the extracellular fluid exists.

The third consideration is the acid-base potential of the blood plasma. This takes into consideration the presence or absence of acidosis or alkalosis. Acid-base derangements can be metabolic or respiratory in reference to etiology. The metabolic disturbances are far more important than respiratory disturbances. The use of the carbon dioxide combining power as a method to determine presence of acidosis or alkalosis still retains its value though there are conditions under which it can be misleading. The acid-base balance of extracellular fluid depends upon the ratio of base bicarbonate ($BHCO_3$) to carbonic acid ($HHCO_3$) or 20 to 1. Therefore, if the base is doubled without an increase in the carbonic acid a state of alkalosis will exist; however, if the carbonic acid increases there is a compensation and no change in the blood pH will take place. Such a situation might be seen in a compensated

alkalosis which was effected by the lungs by retaining CO_2 in the form of carbonic acid to preserve the 20 to 1 ratio. An evaluation of the blood pH is a much more satisfactory method of determining acid-base balance, but unfortunately, this measurement does not lend itself to rapid, accurate, routine use; therefore, of necessity, one will have to refer to the CO_2 combining power but it is advisable to compare the measurement with the clinical symptoms of the patient.

By what has just been said it is obvious that the approach to therapy should be in an organized manner. The steps in procedure have already been mentioned but should be re-stated again. The first and most important consideration is, "Does the patient need fluid and electrolytic medication?" If it is so considered that there is a definite need for this therapy, our organized approach will first consider the fluid volume. Secondly, the osmolar concentration, and thirdly the acid-base ratio.

Though it is true that we are concerned with the fluid elements in the body as a whole, we are able only to deal directly with that which is contained in the extracellular space. It has been found that 22 percent of the body weight in kilograms will equal the total amount of water in the extracellular space. Over hydration can take place but in such instances there would be no indication of fluids. Therefore, in the treatment with replacement of fluids we deal with dehydration. If it is desired to ascertain the state of dehydration a given patient may be in, one would first determine the total amount of fluid which the patient would have in health. This can be gained by multiplying the weight in kilograms by 22 per cent.

Example:

weight—65 kilograms $\times$ .22 = 14 liters. If the patient is severely dehydrated we would use the factor (as previously mentioned in reference to dehydration) of the body weight in kilograms to determine the amount of water now present in the extracellular space.

Example:

weight—65 kilograms $\times$ .08 = 5.20 liters. The patient's normal extracellular being 14 liters minus 5 liters which has been determined to have been lost would leave a remaining fluid content of 9 liters.

We know now that the osmolar concentration has to do with the number of electrolytes in solution and that they have a direct bearing on the osmotic pressure. To determine the osmolar concentration, we need only to add the carbon dioxide combining power in mEq/L to the serum chloride in mEq/L.

Example: If the CO_2 is 41 mEq. per liter and the serum chloride is 71 mEq. per liter, these added together would equal 112 mEq., the normal being 130 mEq. Therefore, 130 minus 112 equals 18. By this we know that the patient is in a state of hypo-osmolarity.

To correct this deficit we will have to take into account that the above calculation has been directed solely to the sodium content of the vascular space, therefore, to complete the calculation of the osmolar concentration, we will multiply the 18 mEq. by 2 which will include the chlorides and will equal 36 mEq. per liter. Now, if we multiply 9 times 36 we will have 324 mEq. or the amount of sodium chloride which will be necessary to return osmolarity to near normal. This replacement should be given in as small amount of water as possible. 500 cc. of a 3 percent solution of sodium chloride will give 250 mEq. of sodium and the same for chloride for a total of 500 mEq. Again the warning should be remembered that it is better to slightly undercorrect than to overcorrect so this procedure would be permissible.

Treatment of acid-base abnormalities must, of necessity, include a discussion of potassium. There is a reciprocal relationship between potassium and sodium. During potassium depletion the sodium of the extracellular compartment shifts to the intracellular compartment causing the sodium content of the cells to increase. By virtue of this shift there will be produced a disruption of the osmolar tension between the intracellular compartment and the extracellular compartment.

It is characteristically true that the kidneys retain sodium when there is a depletion of that ion but this is not so for potas-

sium. Whenever potassium makes its way into the vascular space it is excreted rapidly by the kidneys. There is a normal urinary loss of potassium which averages approximately 50 mEq. per day.

Sodium is the principal cation of the extracellular compartment and potassium is the principal cation of the intracellular compartment. In the presence of acidosis the potassium will leave the cell and enter the vascular space in an effort to neutralize the acidotic state.

It can be said that a high bicarbonate level associated with a low serum chloride level will invariably be accompanied with a low cellular potassium and a high cellular sodium.[3] It can be seen, then, that the chemical structure of the extracellular fluid is built around the sodium concentration and the bicarbonate and chloride ions must adjust themselves, whether in respiratory or metabolic acidosis or alkalosis.

In the case of alkalosis (and we are considering adults only) unless severe it is best allowed to be regulated by the respiratory and kidney buffering mechanisms. In those cases where the alkalosis is persistent it is most likely the result of a sodium-potassium shift. This form of alkalosis will not respond to the usual forms of replacement therapy unless potassium is added.

The same can be said for the treatment of acidosis other than in the severe case. In such cases a 1/6 molar sodium lactate solution may be used.

A final statement in reference to ammonium chloride. This substance may be used if desired in severe alkalosis. However, while this therapy is effective in hastening the restoration of the concentration of bicarbonate in serum, it fails to correct the deficiency of potassium; which is also the cause of the ineffectiveness of the isotonic sodium-chloride solution in refractory cases of alkalosis.

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The Doctor's Stake in

HIGH SCHOOL TRAINING

ROBERT MacVICAR, Ph.D.

THE AUTHOR

"The Doctor's Stake in High School Training" was written by Robert MacVicar, Ph.D., Executive Director of the Frontiers of Science Foundation of Oklahoma, Inc.

The practice of medicine rests upon a scientific foundation. This fact may not be as generally accepted by prospective doctors as is warranted by the facts. Certainly the profession of medicine is facing to a degree at least some of the problems of manpower supply which are acutely evident in the more obviously scientific technological fields.

It is difficult, perhaps, to understand how in an age unparalleled in its use of scientific and technological information there is a declining availability in the schools of courses in science and mathematics, particularly at advanced levels, and declining inclination on the part of young men and women to take such subjects when they are in fact available.

This phenomenum is by no means a local or restricted one. It has been gradually coming on for a period of 25 years and is nationwide in its scope. It has recently resulted in extremely critical shortages of certain types of scientific and technological manpower. The seriousness of this shortage has been recognized by the nation's leaders and has resulted in efforts to correct the situation. Most of the suggestions which have been made, however, must be regarded as palliative rather than truly corrective.

Admission to an approved medical school demands a certain basic training in science and mathematics in the pre-medical curricu-

lum. Unless students come to college adequately prepared to obtain a satisfactory basic understanding of science and mathematics, they may well be oriented away from any of the science-related professions, including the practice of medicine. The usual requirements for medical school admission consist of the following scientific and technological courses: chemistry, thirteen semester credit hours; physics, eight semester credit hours; mathematics, eight semester credit hours; zoology, including comparative anatomy, twelve semester credit hours. In practice, most pre-medical students major in one of the science areas, either biological science or chemistry. Thus, inadequate preparation in terms of high school background may be an insuperable barrier to a medical career even in case of an individual, who in terms of intellectual capacity and interest, might prove to be a highly capable physician if he could surmount the difficulties of inadequate preparation in the elementary and high schools.

Distribution of Science Courses Taken by Oklahoma High School Graduates, Class of 1955

Courses Taken	Number of Students	Percentage
Science Group		
No Science	692	3.04
General Science Only	5,738	25.21
Biology only	1,829	8.04
(One Science or none)	(8,259)	(36.29)
General Science and Biology	9,616	42.25
General Science and one other Science	3,914	17.20
(Two Sciences)	(13,530)	(59.45)
Physics	1,555	6.83
Chemistry	3,183	13.98
Chemistry and Physics	1,091	4.79
Other Science Courses	855	3.76
Mathematics Group		
No Mathematics	13	0.06
General Math. & Plane Geometry	1,109	4.87
General Math. only	2,292	10.07
Algebra only	4,441	19.51
General Math & Algebra	6,556	28.80
Algebra & Plane Geometry	8,117	35.66
Advanced Algebra	4,346	19.09
Solid Geometry	1,123	4.93
Trigonometry	1,381	6.07
High School Arithmetic	2,719	11.95
TOTAL	22,760	

TABLE 1

A very careful survey has recently been made by the State Department of Education of Oklahoma high school youth graduating in 1955. The amount of scientific and mathematical training taken by these students is summarized in Table 1. It will be seen that most students obtained some contact with science, but that less than half took more than two units of science and only approximately 20 per cent took either physics, chemistry or both. The situation in the area of mathematics is no more desirable. Students took substantially less high school mathematics than would be desirable for proper preparation for a science-related career. Under these circumstances, students arrive at the collegiate level and enter college inadequately prepared in mathematical ability and with scant knowledge of the basic principles of science. A very substantial number of them either have had no opportunity to adequately prepare themselves in mathematics or have not taken advantage of the opportunities which were afforded to them in high school. As a result, in the academic year 1955-56, a very substantial segment of the entering freshmen class at the State University of Oklahoma were enrolled in "remedial" courses in the field of mathematics. A similar situation obtains at other universities and colleges throughout the United States. In some instances, these courses were not truly remedial in the sense that they corrected a deficiency which was the student's responsibility, since not all high schools in Oklahoma offer adequate scientific and mathematical training.

Again, citing the statistics provided by the State Department of Education, less than half of the high school population graduating in 1955 had an opportunity to take four years of science in high school (Table 2). A similar situation in all likelihood exists in the case of advanced mathematics, although these statistics are not presently available.

Whose responsibility is it to see that adequate facilities are available to provide proper instruction for the scientific and scientific-related professionals of the next generation? Who has the responsibility of informing young men and women of the "facts of life" with respect to what a scientific or technological career demands in terms of training? Who is responsible to

Opportunity Offered Oklahomo High School Graduates to Toke Course in Science

High School Graduates—Class of 1955

(Data from: Oklahoma State Department of Education)

Course Avoiloble	No. of Students	Percent of Totol	No. of Schools
Chemistry	14,264	61.81	171
Physics	11,498	49.82	100
Both Chemistry and Physics	10,938	47.40	80
TOTAL	23,078		762*

TABLE 2

see that an adequate number of properly trained and oriented individuals apply each year to the medical schools of the nation in order to provide a proper number of adequately trained doctors for the future? It is the responsibility of all members of the scientific and science-related professions to address themselves to these problems. In many instances, particularly in small communities, the doctor and the pharmacist are the only representatives of a science-related profession. Hence, an especial burden falls upon the medical profession to act as a consultant and an adviser on matters of a scientific and technological character in the field of public education. If the local physician does not concern himself about what goes on in the public schools, he may well find that some other pressure group with worthy objectives in and of themselves have encroached upon the time and resources of the school to the extent that to an increasing degree the basic subject matter required for a professional education whether in medicine, law, pharmacy, or any other of the many learned professions has been deleted from the curriculum or has been "watered down" with the end result that inadequate training is provided for those students who choose to go on for a collegiate education.

This problem is particularly acute in Oklahoma where we have the unfortunate combination of an extremely large portion of the youth going on for a collegiate education and an extremely large number of small high schools. There are in the state currently 742* public high schools, a number which is far in excess of the number necessary to adequately serve the present day population of the state in an era of fast transportation and good roads. Over half of the high schools in the state are in high school districts the total enrollment of which in both high school and elementary school is less than 200 pupils. This number is far too small to provide an adequate population and tax base to support parallel curricula for both the student who chooses a college preparatory career and a student who should have terminal vocational preparation in high school.

The members of the medical profession have a responsibility to inform the public of the grave need for more adequate educational opportunities for the youth of today if we are to maintain the quality of the professional services which will be required in the future. The practice of medicine in common with almost every other area is becoming increasingly more complex and increasingly more dependent upon a thorough understanding of the basic principles of biology, physics, chemistry and mathematics. It is ever more essential, therefore, that the prospective members of this profession receive a more and more rigorous discipline in order to achieve a satisfactory status in terms of ability to perform successfully at an age commensurate with a satisfactorily long period of service. The period of indoctrination has, of course, been extended upwards for a relatively few years as short a time as fifty years ago to nine to fourteen years at the present time. There is no question but that this period of time is necessary in order to produce a physician adequately trained to meet the needs of the practice of medicine in the modern age. It is not at all certain, however, that some of the subject matter which is covered in the period of college training could not be forced down into the high school and some of the material now contained in high school curricula learned at an even earlier age. There is good evidence to indicate that actually the abstractions of mathematics are learned more readily by students in their early teens, i.e. junior high school, than they are in senior high school or college. The demands for more and more training can be achieved either by prolonging the period upward in terms of time thus rendering fewer and fewer the years which the individual serves society as a member of his profession, or by

*The discrepancy in the number of high schools given here and the number listed in Table 2 is due to the fact that when the Table was collected (June, 1955), some 20 highschools were in use that have since been abandoned because of integration.

forcing a larger segment of the pre-professional training downward into the college, high school and elementary school to the end that whereas the medical training is as long and as rigorous, it produces a finished product one, two or three years earlier than our present structure is doing.

This of course means a dramatic revision of the curricula in many high schools. It also means the necessity for high schools of sufficient size to provide variation in program for students dependent upon their particular interests and intellectual qualifications. This kind of program certainly will not come overnight any more than the situation in which we now find ourselves occurred rapidly. Such changes, if they are to come to pass, however, will demand the dedicated attention of the members of the learned professions in order to convince the public that these changes are in their own interests.

Fortunately, many professional people in the field of education are becoming increasingly aware of the need for making revisions in the curriculum to provide for more intensive training opportunities for the most able students. Members of the learned professions need to become acquainted with the problems of training in the public schools, to work closely and intimately with the professional educators in order that the objectives which both seek can be achieved. These are that each child is given an opportunity commensurate with his ability to advance by means of the program of instruction available to him and the staffing of the professional ranks of the future by the most competent individuals whose talents and orientation encourage them to enter it. This is a grave responsibility which is laid on each member of every scientific-related profession, including the profession of medicine.

Oklahoma's statewide effort to improve scientific and technological education at all levels under the egis of the Frontiers of Science Foundation should certainly embrace in its scope the medical profession. It is hoped that, in common with certain other groups, the medical profession will recognize this as one of their principal responsibilities and make this task one of their major public service efforts during the next decade. If this challenge were to be accepted, it would mean that unquestionably Oklahoma would advance in this regard disproportionate to the advances made in other states because of the great prestige which the medical profession has, particularly in the small community. Oklahoma's doctors can set the pace if they choose to do so in providing leadership to the youth of the present to achieve their maximum potential for the future.

Have You Heard?

ARTHUR BUSWELL, M. D., Hennessey physician and surgeon, was recently named chief of staff at the Kingfisher community hospital.

GLEN MCDONALD, M.D., submitted his resignation as a member of the Pawhuska board of education. Doctor McDonald has received orders from the U. S. State Department to report for foreign service with the International Cooperation Administration of the State Department. He has a master's degree in preventive medicine from Johns Hopkins hospital.

ROBERT H. FURMAN, M.D., JAMES HAGANS, M.D., STEWART G. WOLF, M.D. and LEONARD P. ELIEL, M.D. were guest speakers to an estimated 100 doctors from the northeastern area of the state held in Tulsa, May 14. This was the first of a series of post-graduate programs.

HAYDEN DONAHUE, M.D., state mental health director, spoke at a joint meeting of the Grady County Bar Association and Grady County Medical Society.

BROCK WESTBROOK, M.D., Bartlesville, spoke at a meeting of the Washington-Nowata County Medical Assistant's Society, May 8.

Special Article

The Importance of Well Organized
TRAINING *in* ATHLETIC PROGRAMS

DON H. O'DONOGHUE, M.D. and KEN RAWLINSON

We have seen in the previous article (J.O.S.M.A. Vol. 49 No. 6:219-221 (June) 1956) that athletics are important and should be continued, that prevention is an important part in management of injuries to athletes. The following section has been prepared by Mr. Ken Rawlinson, head trainer, University of Oklahoma Department of Athletics. Mr. Rawlinson is a well-trained, very capable professional person who has made athletic training a highly successful career and a full time job. He has been a member of many important committees in collegiate training circles and is particularly interested in teaching others successful training methods. A large part of the credit for the supreme conditioning of the University of Oklahoma athletic teams must go to Mr. Rawlinson and his crew of skilled training personnel.

A college trainer or a high school coach who finds it necessary to handle his own training problems (in addition to his coaching) or the local physician who helps out with the high school program, will find that his duties in this respect are divided into these three fields: 1. Prevention of injuries, 2. Treatment of injuries, and 3. Rehabilitation of the athlete following injury.

We, at the University of Oklahoma spend more time on prevention of injuries than is commonly believed by the average layman or even by most high school officials. Many people believe that our work deals exclusively with treatment. It should be emphasized that treatment is only a part of our function and probably a less important part. We know that the more injuries we can prevent, the fewer we will have to treat and rehabilitate. Since an injured athlete is of no value to his team, his coach, or to himself from an athletic standpoint, one of our greatest concerns must be with prevention of the injury which causes him disability. The most important phase of prevention of injury is conditioning. This is a major and vital part of our program. Bob Shelton of the University of Illinois in a recent address before the Illinois Association for Health, Physical Education, and Recreation, made the following statement, "conditioning is more important than skill, because conditioning helps prevent injuries and the best halfback in the world is of no value sitting on the bench."

THE AUTHOR

This is the second of a series of three articles, "The Prevention and Treatment of Injuries to Athletes." Doctor O'Donohue is an Oklahoma City orthopedist and Ken Rawlinson is Head Trainer, University of Oklahoma Department of Athletics. The last of the series will appear next month.

The conditioning program for the fall season at the University of Oklahoma begins at the close of the spring football practice (approximately the middle of April. The major portion of this conditioning program must be carried on by the athlete himself. He cannot be expected to do this without proper direction and instruction. Each boy is given a set of exercises (Fig. 5) which we ask him to use at least three or four times a week until the first of August and daily thereafter until the fall practice begins. He is encouraged to supplement these exercises by jogging, running, endurance, etc. He is also encouraged to maintain at least to some degree his training program by getting plenty of rest, sleep, eating proper food, avoiding dissipation throughout the summer months. Furthermore, each boy is assigned the weight at which he is expected to be when he reports for the first day of fall practice. Our players here at the University

of Oklahoma have followed our suggestion to a "T" ("split T," naturally). We actually have had only one boy in the past three years report in appreciably over weight and that was only a matter of four or five pounds. It is our firm conviction that if the athletes have the desire to be great, they must be, and are, willing to pay the price to help accomplish their goal.

No team is any better than the physical condition of its players. If not in shape an individual player is affected in many ways, to wit: 1. His ability to play, 2. His mental attitude, 3. His determination, 4. His team work, and 5. His spirit. Any, or all of these factors may be affected to the point he is unable to reach his full capacity.

Red Sanders, head football coach at UCLA, recently made the statement that football is 40 per cent ability and 60 per cent physical condition and mental attitude. Tom Harmon, former Michigan All-American and presently a sportscaster, went Red one better on a recent radio show when he stated that football these days is 90 per cent mental and physical preparation. It all boils down to the axiom, *no team is better than its physical condition*. Your objective must be to get your team, as a whole and as individuals, physically stronger and tougher that your opponent. You must impress on your players that many fail to make the team for no other reason than that they are unwilling to pay the price to get themselves in tiptop physical condition.

A second phase of prevention is good equipment. We believe this to be an absolute necessity for a sound program. Of course, we know that many schools have a limited budget with which to work and that this of necessity must handicap them in the purchasing of quantities of equipment. Although the budget is limited, we would warn against the purchasing of large quantities of second rate equipment because by this means none of your players are properly protected. We recommend, instead, that you purchase the best even though your supply may be limited. Too much emphasis cannot be placed on proper headgears. The modern, light weight headgear is extremely protective but does little good if the suspension apparatus is not properly placed to keep the head from contact with the inside of the headgear. Once good equipment is supplied, the coach should insist that in order to compete, the players wear the equipment which has been prepared for them. Rushing into the contest without properly placed shoulder pads and protective knee pads is to be condemned.

Further along this same line, it should be noted that it does little good to have the proper equipment available if the boys do not wear it or if it gets out of condition. At least a weekly check up should be made by some responsible person of each boys' equipment. Is the suspension in his headgear too loose? Are his shoulder pads or hip pads broken? Are his pants too large, so that his thigh pads are sliding? How are the cleats on his shoes, etc? A single loose suspension string in his head gear can mean a severe concussion. The slipping of a thigh pad may result in a "charley horse" which may keep the player out for the rest of the season because of this painful injury.

It is necessary in fielding a team to do a considerable amount of protective taping. Every coach, trainer, or doctor may have his own method. If not, he should qualify himself in a good method, such as is illustrated in the accompanying cuts. Although there are many varieties in method, the following principles should apply:

Rules for Applying Bandage:

1. Be neat, clean, thorough.
2. Use simplest method of application of bandage to accomplish the desired result.
3. Start your bandage with the limp placed in the position in which it is to remain throughout the wrapping.
4. Anchor the bandage well, preferably at an angle to the wrap.
5. Start at the lower part of the limp and bandage toward the body.
6. Bandage snugly but not tight enough to be constrictive.

Rules for Applying Adhesive Tape:

1. Shave the part carefully and apply benzoin or some similar material to the skin.
2. Select the size of tape that best fits the contour of the body, usually smaller size, particularly for the ankle 1″ or 1½″.
3. Basket weave the tape for additional strength at the stress lines.
4. You will find the tape will tangle less if you tape directly from the roll.
5. Be sure the tape is applied smoothly with no wrinkles since wrinkles cause blistering of the skin beneath.

6. For best support tape directly to the skin rather than over gauze or socks.

7. Avoid constrictive circular taping.

8. Replace tape frequently. Do not leave it on over a few days at a time. (In event of tape rash or tender skin, some quick drying adherent may be used. Rash may be treated by calomine lotion or other similar material. If the rash persists, it may be necessary to tape over the dressing although this is not as satisfactory from the standpoint of support.)

As to who should be taped, one should select his own program and then stay with it. We, here at Oklahoma, have only one rule in regard to protective taping. That is, that every boy must have his ankles wrapped or taped before *every* practice session or game. If the ankle is to be taped, we use the method which we think will give the most support (Fig. 3). If the boy wishes to have his ankles wrapped, we will use the figure eight or better, the Louisiana wrap or some other similar method (see cut, Fig. 2). Why do we think it is important to have the ankles wrapped or taped? In a survey made at Harvard University and reported in the *Journal of American Medical Association* of December 14, 1946, Dr. T. B. Quigley, James Cox, and Joseph Murphy stated that since they had started the routine use of ankle wraps (15 years), none of their athletes had suffered a complete ankle ligament rupture. Dr. D. F. Hanley, of Bowdoin College, phrased it a little differently when he said, "we have not lost a man for a game in five years who has worn his ankle wraps correctly." One method which may be used in order to determine whether or not the athletes actually have their ankles wrapped during a practice session is to have them remove their shoes while the coach is talking to them on the field at the termination of practice. The players who have followed instructions and had their ankles properly supported are permitted to go in and shower. Those who have not must remain for extra work on the field. This has been a very effective method of assuring cooperation by the player who feels that his ankles do not need to be wrapped.

Many times during the season it is necessary to purchase or improvise special equipment to protect a specific injury. You may want a fracture glove to protect an old hand injury, a pair of Big Boy shoulder pads to protect a weak or bruised shoulder, a pair of Peel Blocker hip pads to protect a hip, etc.



Fig 1

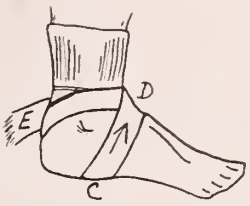
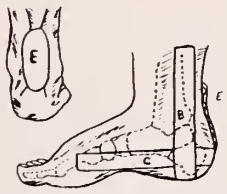


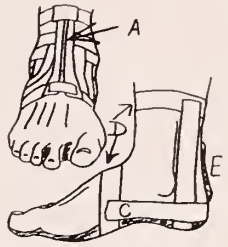
Fig 2



Fig 3


Fig 4





The Louisiana wrap requires a 100" web ankle wrap. Figue 1 is the start (A) of the wrap, crossing the top of the ankle above the lateral malleolus (B), around under the heel from the inner side (C). Figure 2 crosses the dorsum of the foot (D) around the inner side of the ankle above the internal malleolus (E). Figure 3 crosses the outside of the heel under the plantar surface of the foot (F) to terminate at (G) the starting point. The wrap then continues until the bandage is exhausted with suitable overlapping of the turns so that one turn is not directly superimposed over the one beneath it. This application should be made snugly but not tight enough to interfere with circulation. It may be made over a heavy sock, care being taken to avoid wrinkles. A little practice will determine the degree of tension necessary.

Illustrating two basic principles of the basket weave or gibney type of taping. For preventive strapping, the tape should be about as high as remedial strapping for an ankle sprain, the vertical the athlete intends to run.*

It may be necessary to build up a pair of regular shoulder pads with sponge rubber or plastic to protect some specific bruise or partial separation. A turkish towel folded and wrapped around the neck will help to prevent recurring neck sprain and still permit the player freedom of action. (This method was very effectively used by Oklahoma's Robert Burris during the 1954 sea-

*Training Room Manuel, Cramer's of Gardner, Kans.

son in protecting a recurrent neck injury.)

After a boy is injured, the trainer or coach should work hand in hand with the team physician in the treatment of the injury. They should work as a team with the same set of rules and signals with the same objective—the complete rehabilitation of the player. In treating athletes it must be kept in mind that there are several conditions which make them quite different from the ordinary patient. Dr. E. T. Smith, Houston, Texas, lists these conditions as: (1) He is, or should be, strong and in excellent physical condition; (2) He is young and his healing and recuperative power is above average; (3) He has an incentive to get well and will cooperate to the fullest extent and will tolerate early rehabilitative procedures. Because of these factors, we are often able to get an athlete back into competition in a much shorter period than an average working man will feel able to return to his job.

In the treatment of injuries, it must be recognized that the average high school coach has neither the proper scientific equipment nor the knowledge to use which the college trainer or team physician has available. However, there are many relatively inexpensive devices or homemade types of equipment that are available to the high school coach and may readily be used by the coach or student trainer. It should not be expected that the coach would, in addition to his coaching responsibilities, have to take the responsibility for the technical medical care of the players. Actual treatment must be supervised by a physician; the coach should be relieved of this responsibility. The physician should hold himself ready to accept responsibility by either doing the treatment or supervising it through instruction of the proper personnel.

The following items are handy for the training room and are readily available.

1. An infra-red lamp. This has the advantage that it is essentially a heat lamp and the player himself can tell if it is too hot. An ordinary electric heater will serve this purpose if a lamp is not available.
2. Electric pad. This will be found extremely useful and can be readily used by the player himself after first warning him as to the danger of overheat or too prolonged heat.
3. Contrast baths. This is carried out by having two containers each large enough to receive the part injured, usually an ankle, one filled with hot water (104-110), one cold (45-50). The foot is first placed in hot water for a period of three minutes and then plunged into cold water for a period of one minute; three or four series being utilized, starting and ending up with the hot.
4. Shower spray. Remove the shower head and direct forceful spray on the injured area. This has much the same effect as a whirlpool.
5. Home made whirlpool.
6. Hot towels which can be be used alone or in conjunction with an electric pad or other heating method.
7. Hot tub for soaking.
8. Analgesic pack.
9. Percussion Douche (garden hose). Alternate hot and cold forceful stream from 10-15 feet away sprayed along the spine, out on the flanks and over tender areas, care being taken to break the force of the stream with a nozzle or finger tips.

Along with treatment of the injury comes rehabilitation. Rehabilitative exercises should be started just as soon as possible after an injury. In fact, it is advisable to continue exercising other portions of the extremity even though the injured part must of necessity be immobilized. By this method, muscle atrophy can be prevented and it is much better to prevent atrophy than it is to relieve it. If the extremity is kept in very good shape throughout the period of protective immobilization, the rehabilitative period will be much shorter for the part itself since the other muscles of the extremity can take over some of the load. We are attaching hereto the rehabilitative knee exercises which may be used as an example (Fig. 6). Obviously, some exercises will be more suitable than others for a specific situation and they must be all proportioned to the degree of disability of the individual player and gradually increased as he improved. It should be emphasized again that the player as a whole should be rehabilitated, not simply the injured part. It is the unusual injury which will not permit acteive exercise of other parts of the body from the first day.

A related problem with which the high school coach or team physician is confronted is a boy who is afraid of injury. It is necessary to convince this player that if he gets himself in the proper condition he will not be subject to injury. The coach must stress the following points in order to build up the boy's confidence.

1. He must get himself in ideal physical condition.
2. He will be provided with good, properly fitting equipment.

(Continued on Page 263)

A RESEARCH MILESTONE

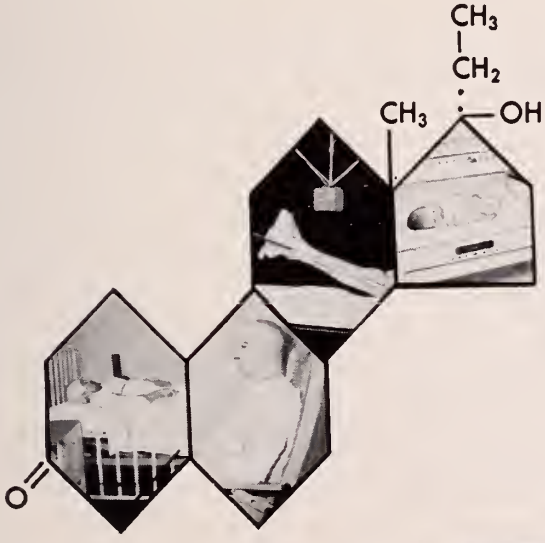
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SEARLE

Association Activities

PRESIDENT'S LETTER



It is no enviable task to formulate and execute an epistle which will interest all the members of this association, and as I am not a member of the literati it becomes more difficult. But this little squibb gives me the opportunity from time to time to tell you something of your state association, its duties, functions and its accomplishments.

A few weeks past is was my privilege to attend the meeting of the A.M.A. in Chicago. Here I saw our chosen representatives, Burton, Shuller, Hoover, Phelps, Graham and Blair in action. On the social, political and legislative levels they made their marks. All of this required tact, time, patience and hard work and they deserve our commendations.

Experience has convinced me that the prime necessity for those who go places and not bring back simply what they took with them, is to rid of all opinions before starting. Opinions and principles are of no doubt noble things, essential factors in the forward moves of humanity—and in the reactionary ones as well—but they are poor things to take along when you are going places with the intention of seeing and knowing what is there.

Were I a layman, here are some of the opinions I would have formulated at Chicago, I trust they will be provocative.

The salient feature one immediately sensed and preceived was, that here gathered together was a profession whose sole purpose was the bettermen of the health of human beings collectively. No selfish interests, aggrandizements or monetary gains were sought. I would be proud to be a part of that profession.

We have come to a point in our national affairs at which medical men should speak as citizens rather than as Physicians. They should not live in this free land to go through the motions of politics, but to get the virulence of states-man-ship. They cannot oppose hopeful programs by negotiations, but must institute programs which will stand criticism and have the energy to move forward against opposition.

No human community will tolerate persistant preventable disease and if any general system of prevention is to persist, active intervention by the Physicians must be ready—and at hand.

At the present time I might suggest that following your customary salutation to your patient, you make the following inquiry, "Have all the younger members of your family received the Polio Vaccine?" This regardless of your type of practice.

Let us cease to feel that we are solicitors when we wish to introduce or promulgate preventable measures. Good health must always be an essential corollary of the O.S.M.A.

Tom McClure M.D.

President

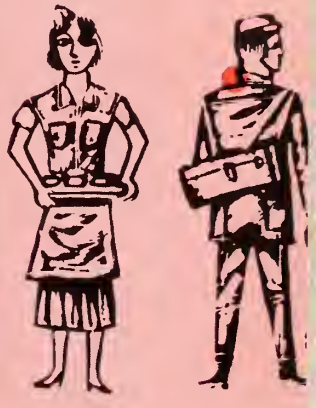
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On May 10, judges at the National Seience Fair in Oklahoma City, May 10-12, began their day-long deliberations over the 213 exhibits prepared by finalists from regional fairs throughout the United States. Here the judges deeiding upon the reeipients of the four awards of the American Medical Assoeiation interview Derek J. Sharvelle (center) of West Lafayette, Ind., who exhibited his work with streptomyein. The AMA judging eommittee consisted of (left to right) H. M. MeClure, M.D., President, O.S.M.A.; Samuel P. Newman, M.D., Denver, Counеil member; Thomas G. Hull, Ph.D., Chicago, Counеil Secretary, and Stanley P. Reimann, Philadelphia, Counеil member. Pictured at the right is Lynn C. Dunn, Oklahoma City with her exhibit illustrating her work with molds and algae. She was one of two top A.M.A. award winners.

National Science Fair Held in Oklahoma City

At the Seventh National Science Fair held May 10-12, 1956 at the Municipal Auditorium, Oklahoma City, Oklahoma, judges began their day-long deliberations over the 213 exhibits prepared by finalists from regional fairs throughout the United States.

Winning the special awards were Lynn C. Dunn, 16, Oklahoma City, Oklahoma, and Evelyn La Heist, 16, San Diego, California.

Lynn's project was a study of molds and algae developed over a two-year period. Evelyn's entry was entitled "Malaria."

The two girls received plaques and an all-expense trip to Chicago where they were guest exhibitors of the A.M.A. at its 105th Annual Meeting held June 11-15.

Other winners included Robert H. Armsby, 17, Washington, D.C., and Robert B. Nathanson, 15, West Hartford, Conn.

The A.M.A. judging committee consisted of H. M. McClure, M.D., Chickasha, O.S.M.A. President; Samuel P. Newman, M.D., Denver, A.M.A. Council member; Thomas G. Hull, Ph.D., Chicago, Council Secretary, and Stanley P. Reimann, Philadelphia, Council member.

Alfred R. Sugg, M.D., Ada, Oklahoma, past president of the Oklahoma State Medical Association, was the keynote speaker at the Awards Luncheon Saturday, May 12. He spoke to the 213 highschool exhibiting finalists on the opportunities and rewards of a career in the medical sciences. The four awards of the A.M.A. were presented at the luncheon.

HAVE YOU HEARD?

ROBERT C. LAWSON, M.D., associate professor of medicine at the University of Oklahoma spoke to the doctors of the Garfield-Kingfisher Medical society about thyroid diseases.

H. VIOLET STURGEON, M.D., was guest speaker for the senior girls at Oklahoma Baptist University, May 19.

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Training in Athletic Programs

(Continued from Page 258)

3. He will be required to have the proper warm up before competition.

4. Once he gets in the game he must play with "carefree abandon." The player who hesitates ends up bruised or with a more serious injury.

It is encouraging to note that we are having fewer serious injuries every year. For example, Dr. Floyd R. Eastwood reported to the American Football Coaches Association in January, 1956, that 10 players died during the past football season (seven in high school and three in college). This is, indeed, deplorable. However, it should be noted that this is a sharp decrease from the annual average of 17.5 deaths since the yearly surveys were begun in 1931. He further stated that statistics show that an American youth is 12 times safer playing competitive football than he is when he is driving in his automobile. We believe that this improvement can be explained by the fact that there are more qualified men in the field of conditioning, that better equipment has been designed and is being used, and that everyone is becoming increasingly concerned about the conditioning of athletes and the prevention of injuries. It has been said that in the past coaches were concerned about *getting* a team on the field but that now they are vitally interested in *keeping* a team on the field. An adequate training program is one of the best means to accomplish this end.

In a subsequent article we will deal more specifically with treatment and rehabilitation in the management of athletic injuries.

Figure 5

OKLAHOMA'S TWO DOZEN—PLUS

Do not go into exercises cold—start with some running and light calisthenics.

1. RUNNING—forward, sideward and especially backward (good for knees).

2. SIDE BENDER — Position: Stand with feet apart, hands clasped overhead, arms straight. Bend sideward to the right, bening right knee and slowly going as far as possible. Repeat to left. Repeat ten times each side.

3. WOOD CHOPPER—Position: Stand with feet apart trunk turned right, hands together and over right shoulder. In a chopping movement bring arms down vigorously between the legs. Uncoil over left shoulder and repeat. Repeat 20 times each side.

4. KNEE STRETCHER—Postion: Stand with feet apart, knees slightly flexed and hands on outside of knees. Press knees together with hands. Knees offering resistance. Repeat outward 20 times.

5. SHOULDER HANG—Position: Grasp an overhead cross bar, ladder, tree limb, etc., and hang elbows straight. Hang one minute, relax and repeat ten times. Especially good for boys with A-C, muscular or nerve shoulder trouble. (If shoulder will permit, walk hand over hand across overhead ladder.)

6. LEG STRETCH—Position: Stand erect with hands at sides. Bend forward without bending knees and touch toes. Repeat 20 to 30 times. Repeat same with legs crossed.

7. TRUNK TWISTER—Postion: Stand with feet apart, hands clasped behind head and elbows back. Bend and bounce downward and simultaneously rotate trunk for to left. Recover and repeat to right. Repeat 15 times to each side.

8. TOE AND HEEL DANCE—Position: Squatting position with trunk erect. Remaining low, jump to the right heel extended in front and the left toe extended behind. Jump again, reversing the order of the feet. Repeat rapidly 40 to 50 times. From same position jump with the right heel to the side and left foot in place. Repeat to left.

9. PUSH UP OR PUSH UP AND CLASP—Position: Flat on stomach with toes dug in and hands flat on ground, clasp hands and catch on hands without allowing body to contact ground. Repeat 10 to 15 times.

10. BUPREE—Position: Standing (1) Squat position with hands on ground, elbows inside knees. Thrust feet and legs backward, weight supported on hands and toes. Return to squat posiltion, then to starting position. Repeat 30 times.

11. MOUNTAIN CLIMBER — Position: Squatting with hands on ground, right leg drawn up to chest and left leg extended to rear with knee straight. With a fast cadence extend right foot backward and bring left leg to chest. Repeat 25 times.

12. HIGH STEP-DIVE—Position: Stationary high step run—dive forward, weight on hands and let chest strike ground lightly, then abdomen, thighs and feet. Jump to feet and repeat 15 times.

13. SQUAT JUMP—Position: Full squat with right foot forward and hands clasped behind head. Spring upward from squat until knees are straight and both feet off ground. Change position of feet. Right foot to rear, left to front and drop to squat. Jump and alternate feet 20 times.

14. ALL FOURS—Position: Face down, weight on hands and feet, and walk forward, backward, sideward, etc. (crab walk—same exercise with back down.)

15. STEAM ENGINE—Position: Clasp hands behind neck and walk forward. As right leg is brought forward, raise the knee, bend trunk and touch left elbow to right knee. Repeat with left leg and right elbow. Repeat 40 times.

16. BICYCLE RIDE—Position: Stand on shoulders with elbows on ground and hands on hips supporting the body. Move feet and legs in motion necessary for riding a bicycle as rapidly as possible for count of 40. Repeat 4 to 5 times.

17. STOMACH DRILL—Position: Flat on back with hands under hips. With legs straight, together,

and toes pointed. Raise foot slowly with a slow count of ten until the legs are penpendicular to the ground, lower them slowly half way and stop, here spread the legs and bring them together eight times, then lower legs to within six inches from the ground and repeat the spread eight times. Raise legs slowly to the perpendicular position and lower them to the ground very slowly. Repeat 8 times. (Relax with 75 rocks of the belly rock—next exercise.)

18. BELLY ROCK—Position: Face down, hands back of neck. Raise head, chest and feet and rock back and forth 75 times.

19. HURDLE SPREAD—Position: Sit in hurdle position with right leg forward. Bend trunk forward and touch right foot with both hands. Repeat 40 times, then extend left leg and repeat 40 times.

20. LEG FLEXING — Position: sitting position. With both hands grasp left leg and pull knee up to ear. Relax and repeat with right leg. Repeat rapidly for count of 100.

21. WRESTLER'S BRIDGE — Position: Weight supported on toes and head. Rotate in circles to right and left.

22. SIT UP AND PAW DIRT—Position: Flat on back with arms extended overhead. Sit up, thrust arms forward and touch toes, knees straight. Return to starting position. Swing legs overhead until feet touch ground behind neck. Dig the dirt with running motion of legs, for 15 counts. Return to original position and repeat 12 times.

23. LEG-BACK STRETCH—Position: Flat on back with arms bracing shoulders against the turn. With knee stiff, raise one leg to perpendicular position and swing it across body until foot touches hand on opposite side, shoulders flat throughout. Repeat 20 times with right, left and both legs (good for low back injuries).

24. SACRIO-ILLIAC STRETCH—Position: Sitting with knees drawn to chest. Lock arms around knees and roll back onto shoulders. Continue to roll and tighten the grip of the arms.

Plus:

Stadium steps	Shoulder Roll (do slowly)
Quarter Eagles	Forward Roll (do slowly)
Starts	Footwork 1 (wave)
Wind Sprints	Side straddle hop
	Rope skipping

After each exercise—Stationary run (run and shake it out).

RUN — RUN — RUN — RUN — RUN — RUN

Figure 6

REHABILITATIVE EXERCISES TO THE THIGH MUSCLES FOLLOWING KNEE INJURY OR OPERATION

Your knee is just as good as your quadriceps (thigh) muscle is strong. It forms the first line of defense against knee injuries. When it is weakened, strain on the ligaments develop.

Knee injuries seldom occur unless the foot is firmly fixed to the ground. Injuries in the pile up may be greatly reduced by keeping the knee flexed.

I. EXERCISES WHILE CONFINED TO BED OR CAST:

A. FLEXOR—Flex muscles of thigh and buttocks and draw knee cap toward pelvis. Hold until leg gets tired. Do anytime in cast, class, movies, bull session, dinner, etc. (Patellar shrugging).

B. LEG RAISING—With knee joint locked (either in cast or out) lift leg up (to right angle) and lower slowly.

C. RESISTIVE LEG RAISING—Same as above only rest the ankle of the uninjured leg, and offer slight resistance to the raising of the injured leg.

CONTINUE ALL OF THE ABOVE EXERCISES AFTER CAST HAS BEEN REMOVED

II. PASSIVE EXERCISES:

A. FLEXION EXERCISES—

1. Sit on table with leg extended over edge. Weight of leg will gradually drop it into full flexion.

2. Sit on table. Grasp shin and slowly pull to buttocks.

3. Lying on abdomen, place bandage around foot (or big toe) and hold in both hands. Attempt to flex knee by pulling on bandage.

B. EXTENSION EXERCISES—

1. Standing. Place heel of injured leg on a low chair and hands on knee (patella). Slowly force knee back (extension).

2. Lying supine, place weight like a saddle bag over the knee.

3. Lying prone, place a weight over the back of the ankle.

C. GRAVITY SWING—

1. Sit on table and swing leg back and forward.

III. ACTIVE EXERCISES

A. QUADRICEPS

1. Sit on the side of the table with the legs hanging over in a vertical position.

a. Raise the foot on the involved side to the horizontal position slowly to the count of 3 seconds.

b. Hold in horizontal position to the count of 3 seconds.

c. Lower slowly to the count of 3 seconds.

d. Rest for the count of 3 seconds.

2. Repeat this ten times. Rest a little.

3. Do this through three series of 10 times each, i.e., 30 times total.

4. These exercises should be repeated two or three times a day depending upon your tolerance.

5. When you are able to complete the series of 30 elevations, add weight to the foot at the next period of exercise and raise this weight until you can do it the full 30 times.

6. Continue these exercises, adding weight successively according to your tolerance until you are raising at least 25 or 30 pounds through this series. You may use the opposite knee for control if you like to get some idea how much you should expect to raise on your injured leg.

7. Make a chart for your daily progress and record on it each period of treatment, noting the ascending curve of your weight lifting capacity.

8. These exercises should be continued until the circumference of the involvel leg and thigh is the same as the uninjured side and until you are able to raise as much weight as you can on the uninvolved side. As your strength increases, these exercises, such as going up and down stairs, partial knee bends, single knee bends, etc.



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Deaths

MORRIS B. LHEVINE, M.D.
1886-1956

Morris B. Lhevine, M.D., widely known Tulsa physician and former director of the Hillcrest Medical center x-ray department died Saturday, May 19 in a Tulsa hospital.

A native of Russia, Doctor Lhevine came to the United States in 1906. In 1913 he entered the University of Oklahoma medical school. Following his graduation he immediately interested himself in the field of x-ray and in 1919 located in Tulsa.

He became a member of the Radiological Society of America in the 1920's. During the 1937 international congress on radiology in Chicago, he was elected as a fellow in the American College of Radiology. He was the third Oklahoman to be so honored.

Doctor Lhevine served as secretary of the board of directors of the Hillcrest Medical center. He was a past president of the Temple of Israel congregation and B'nai B'rith, and was a member of Akdar Shrine, the Kiwanis club and was a 32nd degree Mason.

WILLIAM C. MITCHENER, M.D.
1875-1956

William C. Mitchener, M.D., retired Okmulgee physician died May 24 after several months of illness. Doctor Mitchener was Okmulgee's first doctor and began his practice soon after graduating from the University of Tennessee medical school in 1902.

He was the second mayor of Okmulgee after statehood. He was a member of Okmulgee County and Oklahoma Medical Societies.

J. G. SMITH, M.D.
1870-1956

J. G. Smith, M.D., who practiced medicine in Bartlesville for 50 years, died May 7 after a long illness.

Doctor Smith was born at Newburg, Arkansas and came to Bartlesville in 1910 where he made his home.

Doctor Smith specialized in obstetrics and during his years of practice delivered more than 4,000 babies. His obstetrical records since 1910 were sent to the archives of the library of the University.

He was a charter member of the Washington County Medical Society, a life member of the Oklahoma State Medical Association and the American Medical Association, the Rotary Club and a 32nd degree Mason.

DIVONIS WORTEN, M.D.
1870-1956

Divonis Worten, M.D., pioneer Pawhuska physician, died May 24.

Born in Smithland, Kentucky, he was educated in the schools there and the University of Kentucky where he graduated from the school of pharmacy, and received his degree from the University of Tennessee medical department.

Doctor Worten was well known for his Youth Philanthropy. In 1946 he donated a swimming pool to the children at the Oklahoma Baptist Orphanage at Oklahoma City, Okla. Doctor Worten was the donor of the Worten Athletic Field at the Oklahoma Baptist University at Shawnee, Okla.

Doctor Worten was a life member of the Oklahoma State Medical Association. He had been active in state and national medical groups and in the 1920's and 30's he had attended a number of medical conventions in Europe.

R. J. REICHERT, M.D.
1899-1956

R. J. Reichert, M.D., Norman physician died May 7. Doctor Reichert attended State University of Iowa School of Medicine, Iowa City, Iowa, graduating in 1930. He was a member of the Oklahoma State Medical Association, served in World War II with 21st Evacuation Hospital in South Pacific and on the staff of Central State Hospital, Norman, Okla. He practiced in Moore, Okla. for 20 years.

Radiologists Elect

Lucien M. Pascucci, M.D., Tulsa, Oklahoma was recently elected president of the Oklahoma State Radiological Association.

Other officers included: Simon Pollack, M.D., Tulsa, Okla., Vice President and Sol Wilner, M.D., Tulsa, Okla., Secretary-Treasurer.

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(Continued from Page 246)

him. Was he free, or was he bound hand and foot? 'No one grasped you by the shoulder while there was still time; and now the clay is dry and hardened; and nought will awaken in you the sleeping poet or musician or astronomer that possibly inhabited you from the beginning.'

"*What then is this fifth freedom, this freedom to be one's best? It is the chance for the development of each person to his highest power.*

"If, as I am deeply convinced, we have begun to lose this freedom, why have we lost it—and how can we regain it? I believe it has started slipping away from us because of three great misunderstandings: first, *the misunderstanding of the meaning of democracy.* The principal of one of Philadelphia's great high schools is driven to cry for help in combatting the notion that it is undemocratic to run a special program of studies for outstanding boys and girls. It is undemocratic to have the freedom to be one's best. When a good independent school in Memphis recently had to close its doors, some thoughtful citizens urged that it be taken over by the public school system and used for boys and girls of high ability; that is have entrance requirements and give a top-notch program of studies to superior students who were interested and able to take it. The proposal was rejected because it was undemocratic.

"And out of this misunderstanding of what democracy really means comes what I call the middle-muddle. See what we have done to our American youth; courses are geared to the middle of the class. The good student is unchallenged, bored. The loafer receives his passing grade. And the lack of an outstanding course for the outstanding student, the lack of a standard which a boy or girl must meet passes for democracy.

The loss of our fifth freedom stems secondly from the misunderstanding of what makes for happiness. The aims of our present-day culture are avowedly ease and material well being; shorter hours; a shorter week; more return for less accomplishment. And in our schools, this is reflected by the vanishing hickory stick and the emerging psychiatrist. The hickory stick had its failings, and the psychiatrist has his strengths. But the trend is here; tout comprendre c'est tout pardonner. We excuse. And this weakening, this softness, this avoidance of challenge, runs right through our curriculum. In a recent article on Progressive Education, there appeared this almost unbelievable quotation: 'The writer has seen a class of six hundred and more graduate students in education, comprising teachers, principals, superintendents, vote their opinion in overwhelming numbers that Greek, Latin and Mathematics offered the least likely possibilities for educational growth; and with almost the same unanimity they placed dancing, dramatics and doll-playing high on the list in this regard.' This is reminiscent of the man who said he wanted *his* son to learn something practical like milking a cow. A great teacher replied that while he respected the ability to milk a cow, he would like to have his son learn to do something that a calf couldn't do better. In all seriousness, this scale which descends from doll-playing to Mathematics makes me see red; not just because I disagree with it, but because all of history has taught us this is the way to insecurity, to destruction. Since the early days of John Dewey, all too much of our educational philosophy has been based on pragmatism; what works is right. But how *has* this philosophy worked? Here is the answer of Charles Malik, one of the great minds in the United Nations: 'There is in the West—in the United States—a general weakening of moral fiber. One gains the impression that the great fund of moral strength which has been handed down from the tears and labors of the ages is not being creatively replenished. There is a terrifying wastage of substance. Quality is in eclipse. Quantity and size dominate. Not the better and truer, but the larger and physically stronger. I must say in all humility that the leadership of the West does not seem to be adequate to the unprecedented challenges of the ages'."

The doctor, the minister and the teacher can be included among the better educated people in any community. The doctor must take a leading part not only in matters of science in high school but in seeing that the gifted child has a chance to be his best regardless of the field in which his gift lies.

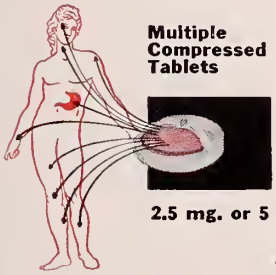
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References: 1. Boland, E. W., *J.A.M.A.* **160**:613, February 25, 1956. 2. Margolis, H. M., *et al.* *J.A.M.A.* **158**:454, June 11, 1955. 3. Bollet, A. J., *et al.* *J.A.M.A.* **158**:459, June 11, 1955.

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PROCEEDINGS OF THE HOUSE OF DELEGATES
of the
OKLAHOMA STATE MEDICAL ASSOCIATION

OPENING SESSION
May 6, 1956

The 63rd Session of the House of Delegates of the Oklahoma State Medical Association was called to order at 1:00 p.m., Sunday, May 6, 1956, in the Hall of Mirrors, Municipal Auditorium, Oklahoma City, Oklahoma, by the Speaker of the House, Clinton Gallaher, M.D.

J. Hartwell Dunn, M.D., Oklahoma City give the Invocation. The Speaker asked the Credentials Committee if a quorum were present. C. Riley Strong, M.D., Chairman of the Committee, announced that a quorum was present.

Doctor Gallaher announced the appointment of the following Reference Committees:

Credentials Committee

C. Riley Strong, M.D., El Reno, Chairman
Marshall O. Hart, M.D., Tulsa
E. Evans Talley, M.D., Enid

Resolutions Committee

John F. Burton, M.D., Oklahoma City, Chairman
A. T. Baker, M.D., Durant
H. H. Macumber, M.D., Chickasha

Sergeants At Arms

W. W. Cotton, M.D., Poteau
E. M. Gullatt, M.D., Ada

Tellers

M. H. Newman, M.D., Shattuck
M. L. Saddoris, M.D., Cleveland

Constitution and Bylaws

H. H. Shuller, M.D., McAlester, Chairman
C. M. Hodgson, M.D., Kingfisher
Louis Ritzhaupt, M.D., Guthrie

Doctor Gallaher announced that there were a number of honored guests present and introduced first, Mrs. E. C. Mohler, President of the Woman's Auxilary to the Oklahoma State Medical Association.

Mrs. Mohler made a brief address thanking the doctors for their assistance and acquainted the House with the accomplishments of the Auxiliary during the past year and their aims for the future.

Following this, Mrs. Mohler introduced Mrs. Mason G. Lawson, Little Rock, Arkansas, President of the Woman's Auxiliary to the American Medical Association and Mrs. John O'Connell, St. Louis, Missouri, President of the Woman's Auxiliary to the Southern Medical Association.

Next, the Speaker called on R. Q. Goodwin, M.D., President of the Association, to introduce Mr. James Webb, Oklahoma City, President of the Frontiers of Science.

Mr. Webb gave an inspiring address on the work of the Frontiers of Science and its importance in the development of Oklahoma.

At the conclusion of his address, Mr. Webb introduced Mr. James Partan, New York, Publisher of the *American Heritage*, who was in Oklahoma City, in connection with the program.

Next, Doctor Gallaher introduced James Babcock, Assistant Archivist of Oklahoma University, who had been doing research work in connection with the 50th Anniversary of the Oklahoma State Medical Association.

Mr. Babcock gave an interesting talk on the history of the Amalgamation of the Indian Territory Association and Oklahoma Territory Association. He also explained that there was discrepancy in the number of Annual Meetings and asked permission to rectify this error in the future.

This concluded the introduction of guests.

Doctor Gallaher asked the pleasure of the House with regard to the reading of the minutes of the last meeting.

Hugh Perry, M.D., Tulsa, moved: "That the reading of the minutes be passed at this time."

Motion seconded and carried.

The next order of business was the election of Officers. Doctor Gallaher announced that Districts 1, 4, 7, 10 and 13 were to elect this year and that there was also an opening of vice-councilor in District 2, occasioned by the resignation of Doctor Glenn McDonald, Pawhuska, at the Council meeting the preceding evening. He announced that there would be a 10 minute recess in order to allow these districts to caucus and decide on their nominations.

After the recess the House reconvened and the Speaker announced that the House was open for nomination for President Elect.

Meredith Appleton, M.D., Oklahoma City, nominated John F. Burton, M.D., Oklahoma City.

The Speaker called for nominations for Vice-President. L. B. Word, M.D., Bartlesville, nominated Forrest Etter, M.D., Bartlesville.

Doctor Gallaher called for nominations for Delegate to the A.M.A. to fill the unexpired term of Doctor James Stevenson, Tulsa, deceased. Doctor Wilkie Hoover of Tulsa nominated Doctor John McDonald of Tulsa.

Doctor W. W. Cotton of Poteau, nominated Doctor Wilkie Hoover of Tulsa.

For Delegate to the A.M.A., for a two year term, to succeed Doctor James Stevenson, Doctor Wilkie Hoover nominated Doctor John McDonald of Tulsa. Doctor W. W. Cotton nominated Wilkie Hoover, M.D., Tulsa.

Doctor Gallaher announced that the House was open for nominations for Alternate Delegate to the A.M.A. for a two year term. Doctor E. H. Shuller of McAlester was nominated to succeed himself.

At this point Doctor Gallaher turned the Chair over to the Vice-Speaker of the House, Doctor W. K. Haynie. Doctor Haynie called for nominations for Speaker of the House of Delegates for a two year term. Doctor Clinton Gallaher was nominated.

Doctor Haynie turned the chair back to the

Speaker of the House. Doctor Gallaher called for nominations for Vice-Speaker of the House for a two year term. Doctor W. W. Cotton of Poteau, and Doctor J. Hoyle Carlock of Ardmore were nominated.

Next were the nominations for Councilors and Vice-Councilors.

From District 1, Forrest Etter, M.D., Bartlesville, nominated J. E. Highland, M.D., Miami for Councilor and L. B. Word, M.D., of Bartlesville for Vice-Councilor.

From District 2, Doctor Powell E. Fry of Stillwater was nominated for Vice-Councilor.

For District 4, Joe Duer, M.D., Woodward was nominated for Councilor and C. A. Traverse, M.D., Alva, was nominated for Vice-Councilor, both to succeed themselves.

District 7, nominated C. C. Young, M.D., Shawnee for Councilor and William McCurdy, M.D., Purcell.

District 10, nominated Paul Kernek, M.D., Holdenville, for Councilor and Doctor C. E. Lively, McAlester, as Vice-Councilor, both to succeed themselves.

For District 13, John B. Miles, M.D., of Anadarko, was nominated for Councilor and Charles Green, M.D., Lawton, was nominated for Vice-Councilor, both to succeed themselves.

This concluded the nomination of officers.

Next on the Agenda was the Report of Officers. The Speaker called for a report from Doctor John Burton, Delegate to the A.M.A.

Doctor Burton advised that there was not much new to report, that the A.M.A. was continuing to fight the proposed new Social Security Act and to redistrict the Activities of the Veterans Administration on Non-Service connected disabilities. He advised that the poll the Association had made with regard to the feelings of the Profession in Oklahoma on the Social Security for physicians question had been quite impressive.

Doctor Gallaher asked Doctor E. H. Shuller of McAlester, Alternate Delegate to the A.M.A. if he wished to make a report.

Doctor Shuller confirmed Doctor Burton's report and stated that in his first year in the House of Delegates of the A.M.A. he had been much impressed with the Oklahoma leadership in that body and the respect which Doctor Stevenson and Doctor Burton had commanded.

Doctor Malcom Phelps, El Reno, Alternate Delegate to the A.M.A. stated that he too had been impressed with the part the Oklahoma Delegates played in the A.M.A. House of Delegates, that they were very highly regarded.

Doctor Gallaher called for reports from the Councilor Districts.

Joe Duer, M.D., Woodward, Councilor from District 4, made the following report.

Report of Councilor District No. 4

"Your Councilor is not aware of any immediate professional or association troubles in this district.

"Your Councilor would like to remind the House of Delegates that this district is composed of 10 counties that lie in a very drouth stricken area, and have less population than any other 10 counties in the state. There are nine hospitals in these counties, and 38 practicing physicians. Many of these are getting old. In Woodward County alone during 1955, one physician died, two retired from practice, and one moved from the county.

"In three of the nine counties there are one each physicians. One of these is of retirement age, and one has no narcotic license. These areas are fertile fields for the cults. In neither of these counties is there a hospital.

"Your Councilor is aware of some six physicians who have located within the district within the past two years. Perhaps there are more, but we have lost in total number of practicing physicians. The preceptor program offers some hope that this situation will be helped, but if the present trend continues the situation will become serious.

"These conditions are not necessarily confined to this district, but the Association should be aware of these facts and efforts made to relieve them before they are beyond help."

Following this, Doctor Gallaher announced that next on the agenda was the Council Report. Doctor R. Q. Goodwin, President of the Association, read the report:

Report of the Council

The Council would again like to call attention to the fact that this is the Fiftieth Anniversary of the Oklahoma State Medical Association and to give a salute and pay homage to those Houses of Delegates which have preceded this one.

Speaking not in a boastful manner, but in one of humility, the Council does believe that the Profession of Medicine in this State has done much of which it can be proud. May the next 50 years be even more fruitful for the health and welfare of our Oklahoma people.

This Council Report, as the previous one, will not deal with all of the accomplishments and programs of the Association, but only the necessary business on which the House of Delegates should estabilsh policy where necessary.

Membership

The paid membership of the Association on May 1, 1956, was 1,496 of which 103 were half-dues members.

In addition there were 134 Life and Honorary Members for a total membership of 1,630.

Finances and Budget

The Council reiterates that the estimating of income and budget expenditures in May for the following year is extremely difficult, if not impossible, and particularly so this year, due to the unknown operating cost of the new building. At the present time the Association is paying $275.00 a month rent and having its total upkeep furnished except for electricity, and your Council believes that this sum will pay ordinary operating expenses at the new building.

Under these circumstances, the following budget is submitted, predicated on the dues remaining at $42.00 a year, which the Council Recommends.

Budget

Dues	$61,000	
Annual Meeting	7,000	
Journal Advertising	24,500	
Miscellaneous	1,500	
	$94,000	
Expenditures		
Office Expense including salaries	$45,000	
Annual Meeting	12,500	
Journal	24,500	
Public Policy	2,500	
General Health Affairs Committee	1,500	
Legal Expense	1,500	
Travel—Out of State	4,000	
History of Medicine	500	
Total	$92,000	
Income over Expenses		$2,000

Building Finonces

Concerning the financing of the Building, the House of Delegates is reminded that it voted a special assessment on the 1955 membership of $35.00 and in the case of the half-dues paying members, $17.50, which it was estimated would raise $52,500 and with the reserve funds of the Association in the amount of $22,600 and the available cash operating reserve, $100,000 cash could be paid for the building. Obviously this would mean that $24,900 would have to come from the cash operating fund and which was and is available. The report of the Building Committee will give further details on the cost of the building, but it is suffice to say now that the cost is slightly under $100,000.00.

Since notice of the Assessment has been mailed to the membership, 62 percent plus, of the members have paid the assessment in the amount of $33,002.50. Your Council points out that any member not paying the assessment cannot be a member of the Association in 1957, as the non-payment of an assessment is the same as the non-payment of dues.

Your Council also would like to give credit where credit is due and to advise the House of Delegates that two County Societies have paid their assessments 100 percent, these being Washington-Nowata and Lincoln. Also, that 10 Honorary and Life members have made contributions, one in the amount of $100.00.

Under these circumstances the Council would urge each of you to report back to your County Society and secure the assessments that remain unpaid.

Shortly after this meeting the Executive Office will advise the County Societies of all members who have not paid and future collections will be made through the County Societies' Secretaries.

Your Council realizes that with the ownership of property comes additional responsibility and ultimately replacement and repair costs. Your Council knowing this fact is of the opinion that future members should bear this cost and, therefore, recommends that the By-Laws be amended to provide a $10.00 initiation fee for all new members and that this money be placed in a separate fund for use only as a maintenance fund for the Building. Your Council estimates this will bring in about $750.00 to $1,000.00 a year. The initiation fee is to become effective January 1, 1957.

Your Council has also considered the provision in the Constitution and By-laws which states that all new members will pay half-dues for two years. Your Council believes that consideration should be given to the young physician starting in practice, but also recommends that the Constitution and By-laws be amended to provide for one year instead of two.

Annual Meeting

As previously reported to the House of Delegates, the 1957 Meeting will be held in Tulsa, on May 5-6-7-8. The Council recommends that the 1958 meeting be held in Oklahoma City, at a date mutually agreeable with the Oklahoma County Medical Society.

Your Council also calls to the attention of the House of Delegates that the announcement of this meeting was for the 63rd Annual Meeting of the Oklahoma State Medical Association, and yet the Association is only this year 50 years old. This has come about as the result of counting the meetings of the Indian Territory Society. The Council recommends that beginning next year, the numerical numbering of the Annual Meeting be corrected to conform with the proper anniversary of the Association.

Grievance Committee

The House of Delegates' attention is called to the Report that will be made by a special committee appointed to study the operation of the Grievance Committee.

It is your Council's opinion that the work of this Committee is one of the most important functions of the Association.

Honorary and Life Memberships

The Council has had submitted to it the following Life and Honorary and Junior Memberships and recommends to the House of Delegates their election:

Life Members

James H. Neal, Sr., M.D., Tulsa
William J. Bryan, M.D., Tulsa
Delbert O. Smith, M.D., Tulsa
Harry Dale Murdock, M.D., Tulsa
Ernest W. Reynolds, M.D., Tulsa
J. Sherwood Jacoby, M.D., Commerce
W. G. Hathaway, M.D., Lone Grove
J. L. Cox, M.D., Ardmore
A. H. Bungardt, M.D., Cordell
Floyd Gray, M.D., Oklahoma City
J. L. Cox, M.D., Ardmore
Elijah S. Sullivan, M.D., Oklahoma City

Honorary Members

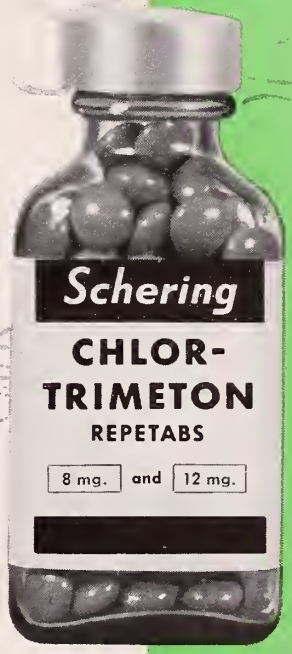
Edward A. Abernathy, M.D., Altus
Fred A. Hudson, M.D., Enid
C. B. Taylor, M.D., Oklahoma City
A. S. Risser, M.D., Blackwell

The Journal

Your Council would like to commend the Editorial Board for the excellent presentations being made by the **Journal.**

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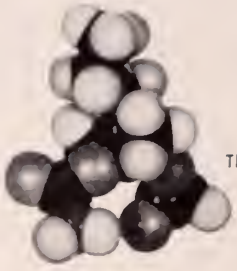


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dry- filled sealed capsules

[1]Albertson, H.A. and Trout, H. H., Jr.: *Antibiotics Annual* 1954-55, Medical Encyclopedia, Inc., New York, N.Y., 1955, pp. 599-602.

[2]Prigot, A.; Whitaker, J. C.; Shidlovsky, B. V., and Marmell, M.: *ibid*, pp. 603-607.

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ACHROMYCIN ACHROMYCIN

The House of Delegates is also advised that the Journal will, with the May issue, commemorate the 50th Birthday of the Association. This issue will be the largest ever published by the Association, and will have great historical significance.

Polio Vaccine

Your Council presumes that the understatement of the year would be that the Polio vaccine program has been a confused one. Probably no other program in the history of medicine has had so much emotional appeal to both the public and the profession because both saw the possible elimination of a terrible scourge. It is doubtful that any program could be worked out that would satisfy all concerned. This is certainly true when supply does not meet demand. Individual members of the Council, as well as the Council collectively, have heard many complaints and wish they had all the answers.

In considering this program, your Council was impressed with one thing above all others, and that was simply that there was no disagreement between public health officials and private physicians, that the one objective was to see that as many children as possible were immunized and that financial remuneration was of secondary consideration if any.

Whether all or any member of the House of Delegates would agree to the Federal Act governing the manner by which the vaccine is made available to the public is a moot question, but it is a fact that when federal monies are used to purchase the vaccine, which has been done in all instances in Oklahoma since the withdrawal of the Polio Foundation, the "Means Test" cannot be employed no matter what our individual or collective feelings may be.

As possibly all of you know, the Oklahoma State Health Department program has basically been that 50 percent of the vaccine allotted to Oklahoma will go into commercial channels with the other 50 percent allotted to county public health departments.

Last night at the meeting of the Council this subject was discussed by Grady F. Matthews, M.D., Commissioner of Health. The Council also had the advantage of the advice and knowledge of Malcom E. Phelps, M.D., a member of the President's National Advisory Committee representing the American Academy of General Practice, and six points were apparent.

1. There is nothing the State Health Department can do concerning the "Means Test."
2. That the supply will be short until probably August.
3. That Oklahoma's allotment of the total vaccine available at the present time is 1.348.
4. That the vaccine allotted to County Health Departments is on the basis of the number of shots it will take to immunize 50 percent of the children in the County under 15 years of age and pregnant women.
5. That distribution and allotment of the vaccine by representatives of pharmaceutical houses cannot be at all times fair and equitable.
6. That this problem is not peculiar to Oklahoma.

Now that all County Health Departments in Oklahoma have received their allotments, your Council feels that the Polio Advisory Committee to The Public Health Department should at once start a review of its present policy of allotment in view of the anticipated increase in the amount of vaccine, in order that the program may become more flexible as far as placing more vaccine into commercial channels is concerned.

Amendments to Constitution and Bylows

The Council has prepared the necessary Amendments to the By-Laws to authorize an initiation fee and to change the half-dues privilege from two to one year if the House of Delegates so desires.

In addition the Council will submit for the consideration of the House of Delegates Amendment to Article V., Section 1, and Article VI, Section 1, of the Constitution, which, of course, will have to await the action of the next House of Delegates. These two Amendments make the Vice-Councilor, Alternate Delegates to the American Medical Association and the Vice-Speaker of the House of Delegates members of the Council, and in the case of the Alternate Delegates to the A.M.A., members of the House of Delegates.

Also the Council is submitting an amendment to the By-Laws, Chapter VII, Section 4, which more clearly defines the duties of the Vice-Councilors, and an Amendment to Section 3, Sub-Section B. which will require County Medical Societies submitting applications for Honorary Memberships to define the applicants' accomplishments. These amendments can be acted upon at this meeting.

"Physicians who have not previously been members of this Association shall be required upon their acceptance as members to pay $35.00, either in a lump sum or $5.00 per year to be directed to the President of the Association, this fund to be used solely for the repair and general maintenance of the building." He moved the adoption of this section of the report.

A discussion followed. Dick Graham called the attention of the House to the difficult administrative problem such an assessment would bring about and that it would probably necessitate the employing of another person. He suggested that the money should be collected by the County Societies.

After further discussion Louis Ritzhaupt, M.D., Guthrie presented an amended motion as follows:

That physicians who have not previously been members of the Association or those physicians who have not paid the $35.00 assessment who desire to be reinstated as members in this Association, shall pay a building fund fee of $35.00 to be collected as other assessments and dues are collected; the funds raised shall be set up into a reserve which can only be used for repair, maintenance and additions to the Associations Executive Office Building."

The amended motion was seconded and carried.

United Mine Workers of Americo

The program of medical and hospital care for the miners and their dependents under the United Mine

Workers of America Welfare and Retirement Fund was brought to the attention of the Council last year when the Fund, through its St. Louis Area Office, announced that no physician in the Ninth Mine Area could do surgery unless he were Board or College certified except in emergency situations and under other limited conditions.

Following this announcement, a Committee was appointed to consult with the representatives of the United Mine Workers, composed of Malcom E. Phelps, M.D., of El Reno as Chairman, E. C. Mohler, M.D., Ponca City, Robert Lowrey, M.D., Poteau, Homer Wheeler, M.D., of McAlester and John F. Park, M.D., of McAlester.

Following the appointment of the Committee a meeting was held in Tulsa with Doctor Brothers of the United Mine Workers Ninth Area Office, but little was accomplished other than to enter into a verbal agreement that the Association's Committee would submit a plan to the United Mine Workers Association whereby an amicable program could be worked out satisfactorily to both the physicians in mining areas and the United Mine Workers Association. Since this meeting, a National Meeting has been called in Charleston, West Virginia, by the A.M.A., in cooperation with the United Mine Workers Association of all states that are affected by this requirement. Attending the meeting representing Oklahoma is Dr. Robert Lowrey, a member of the Committee, and further study by the Committee will be continued.

Your Council feels that this entrance into the field of medicine by the United Mine Workers Association should be resisted to the end that the patient shall not be denied the free choice of physicians and the Union become the dictator of medical care.

The Council will report to the House of Delegates at the earliest meeting possible following receipt of the Committee's recommendations.

Medical Care for Dependents Of Military Personnel

Pending in Congress today is HR 9429, a bill to provide medical and hospital care to dependents of military personnel by private hospitals and physicians. This measure has the backing of the A.M.A. with a minor reservation. Your Council feels that this bill which has already passed the House of Representatives and has had hearing in the Senate will very likely become law in some fashion or other. Should this happen, your Council is of the opinion that the House of Delegates must make a momentous decision as to how the program will be administered. The bill provides that the Bureau of the Budget shall appoint a fiscal agent. This may be an insurance company, a non-profit agency such as Blue Cross and Blue Shield or a State Medical Association. Should the contract purchased by the Government be an indemnity contract, in all probability an insurance company would be the agent. If the government insists on a service type contract, then the agency would probably be an organization similar to Blue Cross and Blue Shield or a State Medical Association. The Council can also foresee that should this program be successful, it might be

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extended to cover dependents of Veterans and Welfare recipients. The next question then, of course, is whether or not the administration shall be done by a third party or whether the medical profession shall run its own proram. Your Counsil is fully aware of the implications that are inherent and would prefer to wait to make a final decision after having a chance to review the bill as finally passed. The Counsil recommends that if the bill is passed substantially as it is, that a special meeting of the House of Delegates be called to make the final decision.

It is hoped by the Council that each delegate will feel free to speak on all matters coming before the House of Delegates in order that the House of Delegates may have the advantage of each delegate's feelings before making decisions.

This concluded the report of the Council. Doctor Gallaher asked whether the House wished to consider specific items in the report and then approve the report as a whole or adopt the report as a whole.

Wayne Starkey, M.D., Altus, moved "That the report be accepted." Motion seconded and carried.

The next item on the Agenda was a report of the building Committee. Doctor Goodwin read the following report.

Building Committee

Your Building Committee regrets that this House of Delegates cannot be meeting in the new headquarters office of the Association as had been anticipated a year ago. However, the building is under construction at Lee and U. S. Highway 66 By-Pass. To better locate the building for some of you, it is approximately six hundred feet West of the Santa Fe Railroad overpass on the North side of the highway.

Since there are new members in the House of Delegates, perhaps a short resume of the history of the building is in order.

The Counsil presented to the House of Delegates in 1954, the idea of the Association's owning its own Headquarters office. The House of Delegates instructed the Council to proceed to study the program and report back to the House of Delegates in 1955, but put a limit of $100,000 on the construction cost. The Council proceeded with the study and in 1955 presented to the House of Delegates its recommendations for financing the building. Three proposals were submitted. One proposal called for the borrowing of money and the paying of interest over a 20 year period; another proposal was to raise the dues for four years; and the third was to place a special assessment on the members of 1955 in the amount of $35.00 and build the building for cash. This latter proposal was adopted without a dissenting vote.

Following this action by the House of Delegates, a Building Committee composed of Past President, the President, and the President-Elect, was authorized to proceed. The Committee is composed of Doctor Paul B. Champlin of Enid, Doctor W. A Howard of Chelsea, Doctor John E. McDonald of Tulsa, Doctor C. E. Northcutt of Ponca City, Doc-

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tor A. R. Sugg of Ada; Doctor Henry H. Turner of Oklahoma City, Doctor Bruce Hinson of Enid; Doctor H. M. McClure of Chickasha and Doctor R. Q. Goodwin of Oklahoma City.

The firm of Coston, Frankfurt and Short was retained and preliminary drawings were submitted. Land was purchased from the Classen Company, which land had to be zoned. This latter necessity has brought about the delay in construction.

After zoning was completed and the plans for the building had been approved, bids were accepted by the Council on March 13. Seventeen contractors submitted bids and these bids ran from $112,000 to $87,000. The low bid was by Smiser Construction Company of Oklahoma City, and this bid was accepted. The contract for construction was signed on March 16, and allows for 135 calendar days which should bring about the completion of the building by August 1.

The total cost of the building, of course, cannot be given to the final dollar at this time. However, it will be under the $100,000 limit set. The cost of the 2.26 acres of land was $6,212.00, building $87,000.00, architects' fee $5,200.00, making an anticipated amount of $98,412.00.

Your Committee fully realizes the building architecture, method of financing, location, etc., will not meet with everyone's approval. As a matter of fact, for a while it looked as if the Committee would end up with a seven sided building to meet the ideas of the Committee members. However, your Committee does feel that the Association will have a headquarters office of which the profession will be proud.

Your Committee also realizes that not all of its work is completed, but does hope that by the next meeting of the House of Delegates, a final report can be given.

This concluded the report of the Building Committee. Joe Duer, M.D., Woodward, moved: "That the Report be approved and the Committee given a vote of commendation." Motion seconded and carried.

At this point Doctor Goodwin read a request for the appointment of a Committee to judge the scientific exhibits and moved: "That such a Committee be appointed and a report made by Tuesday, May 8." Motion seconded and carried.

The next item to be considered was the Report of the Public Policy Committee. Malcom Phelps, M.D., El Reno, Chairman, made the Report.

Public Policy Committee

The Activities of the Public Policy Committee for the past year have been devoted to the problems of legislation on both the National and State level.

Time would not permit a complete discussion of each health bill in the National Congress. Your Committee does feel that these are five measures that merit your attention.

H.R. 7225: This measure is an amendment to the Social Security law and would bring most occupations (not physicians) under Social Security, would lower the retirement age for women from 65 to 62, and, most objectionable to physicians, would offer full retirement benefits at age 50 to persons certified as permanently and totally disabled. (Side comments about trip, etc.)

Your Committee in addition polled the membership on their feelings concerning coming under Social Security and the number of responses received was outstanding. Out of 1,725 cards mailed, 954 were returned. Of the 954 returned, 510 or 53 percent, plus, were opposed to coming under Social Security, and 444 were in favor of it. However, of the 444, in favor, only 78 were in favor on a compulsory basis.

In a recent letter from the American Medical Association, it was predicted that this measure would reach a vote in the Senate by mid-May, and with a good possibility that the disability feature would be eliminated.

HR 9429: This proposal would for the first time give statutory authority to the government to provide Medical Care for dependents of all service men. With one exception the family would have a choice of care in Military or private facilities. The one exception is that the Section of Defense could designate areas where no private care would be paid for by the Government because in his opinion the Military facilities were adequate. For private care the Section of Defense would choose a fiscal agent such as a commercial insurance company, a non-profit company such as Blue Cross or Blue Shield or a State Medical Association. The measure has passed the Hosue of Representatives and is now before the Senate. It has an excellent chance of passage. Since the Council Report also deals with this measure, further comment will be withheld.

HR 9428: This measure is an attempt to encourage physicians to make the Military their career. It provides in addition to the present $100 per month special pay, three other increases of $50.00 a month one after three years, one after six years, and the other at ten. In addition, time spent in Medical School and interne and residency training would be time considered spent in military service for the purpose of rank, pay, and promotion.

HR 483: This bill would authorize the Commissioning of osteopaths in the Medical Corps of the Armed Forces. This bill is opposed by the Surgeon General of the Armed Forces, but is supported by the Assistant Secretary of Defense, Doctor Frank B. Berry. The A.M.A. has opposed the legislation because it is felt that it would defeat the purpose of HR 9428, to encourage doctors of medicine to make the Military their career. This same measure passed the House of Representatives in 1955.

HR 9 & 10: These are substantially identical Bills and would permit self employed persons including physicians to make tax deferred payments to restricted Retirement Plans. Income Tax would not be paid until annuity payments begin. This Bill is commonly known as the Jenkins-Keough Bill. The measure has had hearing on it, but has not as yet been reported to the floor of the House of Representatives.

In addition to these five Bills, there are other measures that are of interest to the Profession, such as the Doctor Draft Law, Federal Law on Narcotics, Medical School Construction Assistance, etc.

Your Committee has and will continue to cooperate with the American Medical Association in supporting or opposing these measures when indicated.

As reported to the House of Delegates at its last meeting, the State Legislature passed no legislation deemed detrimental to public health.

For the coming session, your Committee sees some of our old friends still around. The Legislative Council of the State Legislature which meets between the Legislatures has had before it in recent months proposals for amending the State Narcotics laws, Medical Examiners System in place of the Coroner, and amendments to the Workmen's Compensation Laws. Also, your Committee feels that the Optometrists will again try to take additional eye care for themselves. While the policy of hollering wolf has been proven true in the past nevertheless your Committee is going to again say that it is up to the County Societies to formulate strong Public Policy Committees and take an active interest in local affairs of every nature including the body politic.

At the conclusion of the report R. W. Goen, M.D., Tulsa, moved its acceptance. Motion seconded and carried.

Next was the report of the Insurance Committee. Basil A. Hayes, M.D., Oklahoma City. Chairman of the Committee, made the following report:

Repart of the Insurance Committee

Gentlemen:

The Insurance Committee of the Oklahoma State Medical Association appointed by Dr. R. Q. Goodwin consists of the following members:

Doctor Basil A. Hayes, Oklahoma City, Oklahoma
Doctor Robert L. Noel, Oklahoma City Oklahoma
Doctor Bruce Hinson, Past-president of O.S.M.A., Enid, Oklahoma
Doctor Roy Fisher, Frederick, Oklahoma
Doctor Wilkie Hoover, Tulsa, Oklahoma
Doctor John Horne, Muskogee, Oklahoma.

The Committee has had three meethings of which the first two were devoted to a consideration of group life insurance and other matters.

Group Life Insurance

In September of 1955 your Committee was approached by the Massachusetts Mutual Life Insurance Company concerning the writing of group life insurance contract for members of the Association, and, as you know, this program is now in effect. It might be of interest to the House of Delegates to know that four companies submitted proposals and also that this program was the first one written in Oklahoma for a Professional group.

The program is still open for members of the Association on a Non-Medical basis but will be closed on May 15.

The Massachusetts Mutual has a booth at the meeting and any member desiring to enroll or secure information concerning the program should contact the Massachussetts Mutual representative during the meeting.

Your Committee feels that this program will be of great benefit to many members in working out their insurance needs

Group Health and Accident Insurance

Your Committee has been contacted by many Health and Accident Insurance Companies wanting to submit proposals on group programs.

Your Committee did not feel that it should explore this field until the program on Group Life had been completed. Now that the Group Life program has been consummated, it will next discuss and consider a Health and Accident program.

At the present time the Association has a program with the North American Accident Insurance Company for coverage for members on the basis of $50.00 per week but your Committee recognizes that this is an inadequate program.

Your Committee would also like to emphasize that no other company is authorized to make a like statement. When you are contacted by insurance companies representatives who state their contracts as for members of the Oklahoma State Medical Association, they are in no way speaking for the Association and you should remember the often stated quip—"Let the buyer beware!"

Standard Insurance Reporting Forms

Through a Resolution from the Tulsa County Medical Society, the adoption of a standard reporting form was started some time ago.

At approximately the same time, the Council on Medical Service of the American Medical Association was working with the insurance industry on the same problem.

Your Committee felt that more would be accomplished in a harmonious manner by working with the Insurance companies.

It is hoped that shortly after this meeting the final form can be worked out and adopted for use in Oklahoma.

The third Committee meeting was held March 4, 1956. Members present were Doctors Hayes, Hoover, Horne, Noel, with President Goodwin and President-Elect McClure. Also present were Dick Graham, Attorneys Foliart and Hunt, Mr. Hirsch of the legal department of the A.M.A., Mr. Bainbridge, Mr. Estes, local representative of the Saint Paul-Mercury Insurance Company and Mr. John Parish, Executive Vice-President of the Saint Paul-Mercury Insurance Company.

Evidence was presented to the Committee by Mr. Parish as follows:

1. There has been an alarming increase in the number and size of claims against members of the Oklahoma State Medical Association during the past two years.

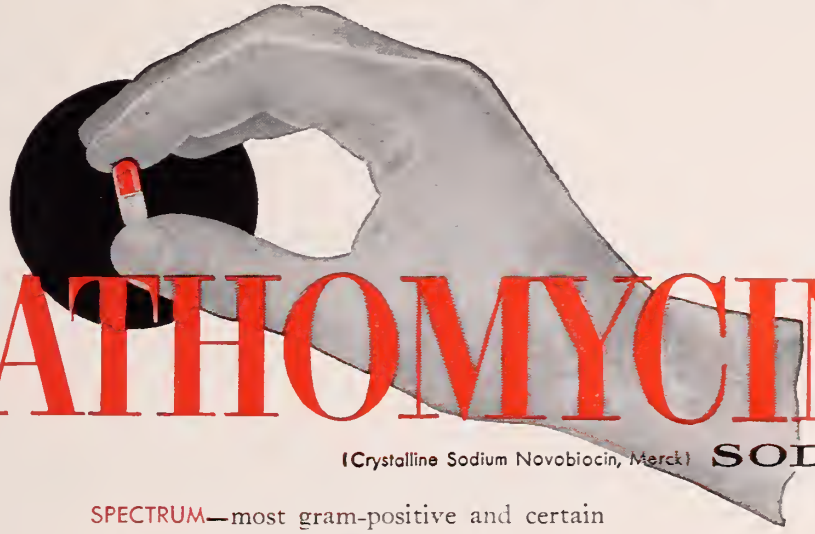
1954:	
Physicians	
Premiums	53,766
Losses & Reserves	22,291—41.5%
Surgeons	
Premiums	41,852
Losses & Premiums	37,598—89.8%
Total	
Premiums	95,618
Losses & Reserves	59,889—62.6%

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1955:

Physicians	
Premiums	57,302
Losses	65,174—113.7%
Surgeons	
Premiums	51,033
Losses	53,506—104.8%
Total	
Premiums	108,335
Losses	118,680—109+%

2. On the basis of these figures, Mr. Parish requested an increase of premiums as follows:

Present rate—10,000-30,000—all members, $52.00 per year.

New rates — 10,000-30,000—non-surgeons—$54.00; Surgeons—$81.00.

Non-surgeons radio therapist—$135.00.

Surgeons radio therapist—$162.00.

Mr. Parish did not demand the raise but pointed out that rates practically everywhere else are much higher than these and after thorough discussion, the Committee voted to recommend the new rates as suggested by Mr. Parish.

Also brought out in the discussion were the following facts:

1. The new rates will become effective 6-15-56.

2. The Company engages two firms of attorneys in Oklahoma—Foliart and Hunt, Oklahoma City and Tabor, Rucker and Cox of Tulsa. Mr. Roger Bainbridge is the adjuster for the entire state.

3. The application blank for mal-practice insurance is being revised and will in the future contain certain new questions. They are:

(1). How often is the doctor's x-ray machine calibrated?

(2). What special training for surgery has the doctor had in the way of internship or residency?

These matters were thoroughly discussed and the committee voted to approve the request of the company to be effective June 15, 1956.

Following this there was some discussion regarding the nature of the claims which have been filed during the past year. It was brought out that out of 32 claims during the first half of 1955, nine were orthopedic, eight were in the field of abdominal surgery, four were due to x-ray burns, five were skin or vaginal burns from chemical used, two were from anesthesia injury to eyes or teeth, one was because of a defective vas ligation, one was because of transfusing the wrong type of blood to a patient and two were medical, one being a case of administering penicillin after the doctor was told that the patient was allergic to this drug and the other where a child died of eating aspirin tablets and the doctor was criticised for not saving it. The eight abdominal surgery cases consisted of four cases in which a hemostat or sponge was left in the abdomen, two cases where the skin was injured from tape or Tr. merthiolate and two of unsatisfactory after care.

These statistics showed that more than one-fourth of the claims were orthopedic; another fourth were abdominal; one-eighth were due to x-ray burns; one-sixth were due to chemical burns—totaling about

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three-fourths of the claims and all preventable by more careful techniques. It would seem that an educational campaign among our members for the purpose of pointing out ways and means of preventing such accidents would be quite helpful to the statistics of future years and would ultimately mean lower rates for our insurance. We have already had one meeting in Tulsa last month in which all doctors who have joined the Tulsa County Society during the past three years were indoctrinated along this line. Talks were given by Mr. Rucker, the attorney from Tulsa, Mr. McAuliff, attorney from the legal department of the A.M.A., Doctors Hart and Flack from Tulsa and Doctors Goodwin and Hayes from Oklahoma City. Those attending appeared to take the matter seriously and several expressed their gratitude to us for coming to them with such a program. Only this week Mr. Stetler, head of the legal department of the A.M.A. wrote us asking that we write an article for the Journal on "Safety Engineering in Medical Practice," covering such matters as we discussed in Tulsa. We recommend, therefore that the committee succeeding us continue this activity.

This concluded the report. Doctor Hayes then answered questions which the members of the house asked in regard to the proposed increase in malpractice rates.

Following this Doctor Louis Ritzhaupt moved: "That the Report of the Committee not be accepted, that it be referred to the Council for further consideration and reported back at the night session."

Doctor Hayes pointed out that the matter had already been before the Council and that the Council had approved the Report.

Doctor Ritzhaupt amended his motion to state: "That the Report of the Committee be rejected regarding the increase in Malpractice premium."

Doctor Hodgson seconded. Motion carried.

The next item on the Agenda was a Report of the Grievance Committee. Doctor Ralph McGill, Tulsa, Chairman of the Committee made the following Report.

Report of the Grievance Committee

Since the creation of the Committee in 1949 it has considered and closed 108 cases.

Since the Committee's last report at the 1955 House of Delegates meeting eight cases have been filed against members of the Association and of these, four have been settled to the satisfaction of the person making the complaint and the balance are under consideration.

All of the above complaints involved fees and services.

From a review of the past and present cases, it is clear that by far the leading cause of complaints to the Committee is dissatisfaction in regard to fees. It can likewise be truly said that this dissatisfaction does not result from the fact that the fees are too high in most cases, but rather from the fact that the physician and the patient had not arrived at a clear understanding in regard to fees at an early stage in their relationship. As a result, the Committee wishes to emphasize that if all members of the Association would take the time to frankly discuss the matter of fees with their patients, there is little doubt that it would be possible to eliminate approximately 75 percent of the cases which come to the Committee. This means not only discussion of fees for major surgical procedures but for medical services as well, especially for complete physical examinations with the necessary laboratory and x-ray services.

One practice which causes misunderstanding is that some physicians delegate to their secretaries or other personnel the responsibility for handling all arrangements in regard to fees and collections. The Committee, of course, realizes full well that routine matters of this sort should not consume the time of the physician. On the other hand, when a fee or any other matter has become the subject of misunderstanding or dispute between the physician and the patient, it is the belief of the Committee that the matter should be personally handled by the physician directly with the patient.

In that connection, the Committee would likewise emphasize that letters obviously dictated by the physician and written in the third person, and signed by the secretary are indeed not an evidence of good faith on the part of the physician and are readily recognized for what they are.

Likewise similar correspondence written by the secretary without consultation with the physician cannot be expected to produce a satisfactory solution of such situations.

While your Committee does not wish to question the use of the services of collection agencies, the Committee would point out that in the field of collections lies the major area from which the complaints arise, either from the approach or methods employed by the physician, his staff, or the collection agency—and usually from the latter. A serious effort should be made to discuss with the individual, personally, the matter of the fee and the manner of payment before it is released to an agency for collection, and this is especially true if there is any reason to believe that the patient feels the charge is excessive or unjustified under the circumstances.

Another impressive cause of public dissatisfaction with the profession which could easily be eliminated is produced by the failure of the physician who requires consultation to make clear to his patient the relationship between the patient and consultant, and the patient's responsibility for the fees of the consultant.

Perhaps the conclusions of the Committee report can best be summed up by the statement that a satisfactory and sound physician-patient relationship can best be based upon the Golden Rule. Courtesy, consideration and sympathy for the problems of the patient are indeed the attributes of the true physician, a few minutes taken occasionally from the busy rounds to understand the patient's viewpoint, could eliminate much misunderstanding and change an unhappy person into a grateful patient.

Your Committee has been consulted by the Special Committee appointed to review the working of the Committee and concurs in its recommendations.

This concluded the report of the Grievance Committee. Doctor Ned Burleson of Poteau moved:

"That the report be accepted." Motion seconded and carried.

Next was the Report of the Rural and School Health Committee. In the absence of R. C. Emmott, M.D., Stillwell, Chairman of the Committee, Doctor Gallaher read the following Reports:

School Health Sub-Committee Report

The School Health Sub-Committee has continued as an active sponsor of the Annual School Health Conference in cooperation with the Oklahoma Advisory Health Council, Oklahoma Association of School Administrators, State Health Department, and a member of other organizations.

R. Q. Goodwin, M.D., accepted an invitation to address this group and his remarks were most appropriate and well-received. In the afternoon session, he appeared as a moderator for one of the panel discussions. Also representing you, was Fred V. Hein, Ph.D., American Medical Association Consultant in School Health who delivered an excellent and enlightening presentation.

Your Committee feels that active participation in this Conference should be continued and encourages every physician in the state to cooperate with his local school authorities in working toward better health for the school age child. The Committee finds that most school systems throughout the state are anxious to receive counsel and advice from physicians. The Committee would also like to point out that it is a duty of every doctor of medicine to assist the school authorities in any way possible, rather than leave it up to others who are not members of our profession, to take over the function for us.

Rurol Heolth Sub-Committee

The Rural Health Sub-Committee reports continued progress in its health education efforts which have been directed toward rural communities.

For the third consecutive year, this committee has assumed leadership in co-sponsoring a statewide Rural Health Conference. Not only have these conferences been successful from a health education standpoint, but, due to the prominent part which the Association has played, have become a valuable public relations tool. The interest and enthusiasm of Oklahoma physicians in helping rural people to better health has been impressed upon all who attended these conferences and, no doubt, has brought our profession much closer to the hearts of our rural citizens.

The conference during the past year was a particularly successful one. The 300 attendance figure again shows an increase over the previous years; the meeting this year being the largest one to date.

Of particular interest to you will be the Governor's endorsement of your Committee's endeavors. Governor Raymond Gary attended our conference this year and extended official greetings to the participants. He pointed out the great progress which has been made in Oklahoma in health education as a result of the willingness of people to help others, as exemplified by conferences such as this.

Immediately following this Session of the Association, the Rural Health Sub-Committee is prepared to again call together representatives of the groups which have sponsored the past Rural Health Conferences, and plans for the Fourth of such meetings will be well under way by mid-summer.

Your Committee urges the continued approval of the House of Delegates for the Rural Health Conference and enlists the support of the County Societies in this program which we feel is so inherent with the aims of our profession.

Your chairman and the Associate Executive Secretary, Mr. Don Blair, recently attended the National Rural Health Conference which is sponsored by the American Medical Association. The Conference was a worthwhile and informative one, and the ideas related at this meeting between ourselves and representatives of other state associations will be invaluable assistance in making continued progress in our rural health efforts.

Doctor A. L. Johnson of El Reno, moved the acceptance of this Report. Motion seconded and carried.

Next on the agenda was the Report of the Military Affairs Committee. Doctor Gallaher read the following Report:

Committee on Military Affairs

Since its last report to the House of Delegates, there have been no meetings of the Committee because there has been no Selective Service call for physicians for July of this year. The call is for 286 and it is expected that the State of Oklahoma will supply either two or three of this number.

Notice has also been given to Selective Service that there may be additional calls for October of this year and April of 1957. It is also assured that most of these physicians will come from the Priority III. This group is those physicians who have had no military service and paid for their own education.

What the physician manpower needs of the armed forces will be in the future, of course, are not known. However, it is believed that if H. R. 9429, the Military Dependent Medical Care Bill, is passed by Congress along with H. R. 9428, the Military Career Incentive Pay Bill, that future demands for physicians from private practice will be lessened.

The Committee will continue to function through the County Medical Society Committee in securing recommendations as to the availability of physicians for Military Service.

Doctor A. L. Johnson of El Reno moved the acceptance of the Report. Motion seconded and carried.

Next on the Agenda was the report of the Committee for the American Medical Education Foundation. Doctor Joe Duer, Woodward, made the following report:

Report of the Committee for the American Medical Education Foundation

At the annual meeting of the House of Delegates in 1955 the chairman of this committee reported to this house some of the history and background of the American Medical Education Foundation. Included in this report were some figures to show that our State Medical School had benefitted to a great extent from this Foundation and its companion organization, the National Fund for Medical Educa-



Doctors also die

What would happen to your wife and your family if you should die tonight, Doctor? According to an article in the American Medical Association letter of October 18, 1955:

"Only one doctor in eight survives his wife."

"One out of three physicians left no will."

"Expenses of settlement of the estates studied ranged from a minimum of 13% to as much as one-third of the total estate."

These are startling figures!

Long years of hard work and self-denial characterize the building of a doctor's estate. This emphasis on work is perhaps unavoidable; but, nevertheless, has often resulted in the failure to plan the transfer of his estate to his wife and children.

We hope that the facts and figures we have pointed out do not pertain to you. However, if you have neglected the vitally important business of arranging for the transfer of your estate in the event of your death, our Trust Department will be happy to discuss this urgent matter with you immediately.

Now—today—call REgent 6-1531, and ask for our Mr. Scott. He will be happy to call on you at your convenience.



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tion. It was further reported that contributions from the State of Oklahoma were far below the benefits received, and that the state ranked at the bottom in number of contributors and funds as compared with the other states.

Mr. Hiram Jones, the executive secretary for the A.M.E.F. was then introduced and spoke to the members of the House.

Following this a motion was made and carried that a sum of $500.00 be allowed for the purposes of carrying on a campaign in the state for this fund.

Your president appointed Doctor Joe L. Duer as chairman, and Doctor M. O. Hart and Doctor Matt Connell as members of this committee. This committee has carried on its work by correspondence. This correspondence has developed some interesting facts and views. It has developed that the committee feels that there has been far too little understanding of the subject by the physicians of Oklahoma. The physicians have been asked to donate to many worthy causes, and are ready and willing to make contributions to causes which they feel are worthy and commendable. Examples of their contributions are evidenced by the Oklahoma Medical Research Foundation, and by the action of this house in levying a special building assessment. But the committee feels that not enough local education has been done toward A.M.E.F. to produce any notable contributions.

At the present time it seems to be the concensus of the committee that some form of dues payment contributions will be needed to make any substantial showing. The committee is further of the opinion that such a proposal at this time would not be welcomed, with the degree of knowledge that the average physician of Oklahoma has on the subject. Doctor Hart attended the National meeting of the A.M.E.F. at Chicago in January. This subject was debated there and the Resolution passed that a part of the dues to the A.M.A. be assessed for the A.M.E.F. Doctor Hart opposed this proposal with some support, on these grounds: 1. That the amount to be assessed should be a matter for each state to decide, and 2. That inasmuch as some states did not require their members to pay the A.M.A. dues, as does Oklahoma, that such an assessment would be unjust, and would result in loss of membership to the A.M.A. and to those states in which membership was mandatory.

In its inception A.M.E.F. was subsidized by a half million dollars per year from A.M.A. This fund has been reduced to $100,000 per year. All of the operation expenses are paid by the A.M.A., so that every dollar contributed by the physician goes intact to the medical schools. It is known that medical schools of this country need an additional $10,000,000 per year to maintain their standards. This is in addition to buildings and equipment for same. The Federal Government has under consideration at the present time appropriations for building funds for the medical schools. The next step is funds for operation, and with that our medical schools are under Federal domination.

It was to forestall such an eventuality that the

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A.M.E.F. was created. For the same reason the National Fund was likewise created to receive donations from industry. And finally, only as recently as April 15, it was announced that the Ford Foundation would make matching grants to the National Fund and A.M.E.F. in the amount of $10,000,000 on a sliding program that might continue for the next 10 years. This was totally distinct from the $90,000,000 endowment grant made in December. In announcing this grant it was stated, "The Ford Foundation is aware of the critical needs of the nation's medical schools and of the threat to the national welfare posed by their current plight."

These and other considerations have been considered by your committee but as yet no concrete action has been taken. None of the appropriated funds have been spent.

It is the considered opinion of your committee that the Oklahoma State Medical Association and the physicians of Oklahoma should be censored for not having kept abreast of the developments in this field. Your committee likewise must come in for some comments for not having covered more ground during the past year.

It is further the opinion of this committee that this House of Delegates should take some concrete action toward informing the physicians of the state more fully regarding this matter. To further this end, the committee recommends that this house consider three things:

1. A direct contribution from the Association annually to A.M.E.F.

2. An assessment to be added to the dues of the members of this Association, such assessment to be not more than $1.00 per annum.

3. The formation of committees in each component society in conjunction with the State committee to further educate the physicians as to the needs for these purposes, with attempts and appeals for voluntary contributions.

This committee further recommends that the Woman's Auxiliary be highly commended for their work in these efforts. Through their efforts they have provided more contributions from this state than the medical profession itself.

Your committee is aware that there are variances in opinion about the manner of distribution of these funds, and the manner in which they are handled. It is the considered opinion of your committee that the primary objective for which such funds are needed, and the very objectionable features of any alternate governmental plan should far outweigh any personal opinions as to some of the problems of managements of such funds. Such problems could well be altered in the future, while a governmental plan would not only be permanent but wou increase in its objectionable features as time passed.

This report is respectifully submitted. I move its acceptance, and that the recommendations herein made be fully considered.

Doctor Duer's motion for acceptance of the report was duly seconded and carried.

Doctor Duer then introduced to the House Mr. J. Oliver, of the National Fund for Medical Education.

Following this, the Speaker advised the House of a Petition from Tri-County Medical Society for demalgamation into two separate societies, one society to be composed of Choctaw and Pushmataha counties and the other McCurtain County. It was moved, seconded and carried that this Petition be accepted.

The Speaker called for the introduction of Resolutions by Title only. Six Resolutions were presented.

As this concluded the business of the opening Session the Speaker announced that following the Necrology Report, the House would adjourn to reconvene at 7:30 p.m.

Doctor Keiller Haynie, Vice-Speaker of the House of Delegates asked everyone to stand and read the Necrology Report.

Necrology Report

Since the last Necrology Report in May, 1955, the Almighty in His Infinite Wisdom has called from our midst 60 of our beloved friends and co-workers. While we bow in sorrow to the will of the Almighty, we are appreciative of these wonderful men—physicians, scientists, teachers and friends, and their far reaching influences which will continue to inspire us to carry on their duties to humanity.

THEREFORE, BE IT RESOLVED that the House of Delegates of the Oklahoma State Medical Association recognize the demise of those former fellow physicians and instruct the Secretary to inscribe with honor and regret the following names upon the records of the Association:

Felix M. Adams, Vinita, December 28, 1955

Frederick Addison Anderson, Claremore, January 7, 1956

George Simpson Baxter, Shawnee, November 15, 1955

Walter Henry Calhoun, Tulsa, May 10, 1955

Omer Clarence Coppedge, Bristow, April 6, 1956

Charles Dorsey Dale, Atoka, April 5, 1956

James Albert Dillard, Waurika, July 30, 1955

A. Dixon, Hennessey, April 11, 1956

Archie Longshire Dougan, Carmen, September 29, 1955

John Wardell Frederickson, Oklahoma City, September 21, 1955

Felix Thomas Gastineau, Tulsa, July 27, 1955

Robert Lee Gee, Hugo, June 22, 1954

Carl Holmes Guild, Sr., Shidler, September 15, 1955

Sam Stimson Haberly, Wapanucka, April, 1956

Gilbert Hoke Hall, Tulsa, September 17, 1955

Bunn Harris, Jenks, July 12, 1955

Wm. Ocellus Hartshorne, Spiro, December 19, 1955

Tully Lee Henry, Wilburton, July 27, 1955

Joel Samuel Hooper, Muskogee, October 18, 1955

Henry Amasa Howell, Holdenville, November 26, 1955

William Patrick Jenkins, Okemah, March 17, 1956

John Paul Jones, Dill City, January 9, 1956

Lawson Daniel Jones, Talihina, February 18, 1956

Loyd Wesley Judd, Jr., Prague, March 4, 1956

Wm. May King, Oklahoma City, January 15, 1956

Louis Clifton Kuyrkendall, McAlester, March 27, 1956

Samuel Brewster Leslie, Okmulgee, November 11, 1955

James Ira Lyon, Edmond, July 11, 1955

Charles Hamilton McBurney, Clinton, May 18, 1956

Mascoe Ruben McCroskie, Fairview, March 13, 1956

Alvin Maun McMahan, Duncan, May 30, 1955

Silas Sylvester Mohrman, Tulsa, May 22, 1955

Vance Frederick Morgan, Harrah, April 14, 1956

Richard D. Morris, Allen, May 16, 1955

Bert Leon Morrow, Salina, February 12, 1956

George Henry Niemann, Ponca City, December 31, 1955

Albert C. Peacock, Tulsa, November 28, 1955

Clarence Sibley Petty, Guthrie, September 25, 1955

Loren Cecil Presson, Tulsa, November 30, 1955

William Ward Rucks, Sr., Oklahoma City, July 14, 1955

Wm. A. Sanders, Antlers, August 30, 1955

Thomas Luther Seaborn, Ada, March 19, 1956

Charles Enoch Sexton, formerly of Stillwater, May 2, 1955

Nathaniel Norwin Simpson, Henryetta, January 8, 1956

Frank Herbert Sisler, Bristow, April 6, 1956

S. A. Spann, Meridian, May 19, 1955

James Stevenson, Tulsa, September 11, 1955

George Washington Stone, Ardmore, February 20, 1956

John Henry Taylor, Tulsa, March 4, 1956

Oscar Elsworth Templin, Tulsa, August 16, 1955

John E. Tomkins, Yukon, March 21, 1956

Wm. Albert Thompson, Stigler, August 11, 1955

Sherman M. Toney, Bennington, July 12, 1955

John Paine Torrey, Bartlesville, October 1, 1955

Vernon L. Turrill, Tulsa, January 26, 1956

Derk Andrew Vloedman, Woodward, October 6, 1955

Alton James Weedn, Duncan, March 28, 1956

Charles Stuart Wallace, Holdenville, February 13, 1956

Clarence L. Wellman, Grove, June 12, 1955

Weslie Marshall Westfall, Oklahoma City, March 21, 1956

LeRoy Wilhite, Perkins, July 9, 1955

Book Reviews

EXPERIMENTAL TUBERCULOSIS, Bacillus and Host. A Ciba Foundation Symposium. Edited by G. E. W. Walstenholme, O.B.E., M.A., M.D., C. Ch., and Margaret P. Cameron, M.A., A.B.L.S. Pp. 396. Illustrated. Little, Brown and Company. Boston. $9.00.

As its title suggests, this work is a compilation of papers regarding recent experiments on the nature of tuberculosis and its reaction in various hosts. The symposium gathered the foremost experimental pthisiologists of the world for discussion of various facets in their complex field. This meeting was financially supported by the Ciba Foundation which provides an international center in London where medical and chemical research workers are encouraged to meet informally to exchange ideas and information.

Research in immunological, serological and biochemical aspects of tuberculosis are presented in over a score of papers from Europe and America. Full discussions of each paper are included.

The information contained in this collection of reports is not applicable clinically hence the volume will be of scanty interest to the practitioner but the experimental pthisiologist will find much stimulating material in this book.—John G. Matt, M.D.

VASCULAR SURGERY. Medical Department, United States Army, Surgery in World War II, Edited by Daniel C. Elkin, M.D., and Michael E. DeBakey, M.D. Office of the Surgeon General, Department of the Army, Washington, D.C., 1955.

The material in this book is of note because it is the first time that the Army has published a volume of this magnitude on this subject. The authors point out that vascular surgery, in the report following World War I, was given one paragraph.

Special centers were established for the care of vascular injuries, with specialized staffs in attendance.

The story of the growth of the different centers—(1) Ashford General Hospital, (2) Percy Jones-Mayo General Hospitals, (3) Letterman-Torney-Dewitt General Hospitals—is of interest in the way they were planned and grew into definite vascular centers.

Great detail is given as to the history obtained and the type of physical examinations performed. There is an excellent discussion on the use of the tourniquet in battle injuries. The care of battlefield arterial injuries and debridement is related. Refrigeration of injured extremities in the Mediterranean Theatre is discussed. Throughout the text, cases were given that excellently demonstrated the procedures used. Doctors Elkin and Shoemaker discuss arterial aneurysm and A V Fistula. They point out that World War II cases "far exceed any similar series recorded." The different types of weapons used partially account for this increase. They give the most common sign — a bruit — always continuous, lasting through systole and diastole, with a systolic accentuation. Usually, the larger the fistula, the louder the murmur. This was not always true. It was transmitted at times. "Invariably the chief cause of failure to hear the murmur of an A V Fistula was the failure to listen for it."

The history of previous work through the years on aneurysms and A V Fistulae was related. They developed interesting data as to the stroke volume of the heart and pulse rate pre- and post-operatively. No case developed frank congestive failure. They point out, however, that they had a select risk group. They feel that there is still room for a more complete explanation of the effect of an A V Fistula upon the circulation. Alteration of cardiac sizes in A V Fistula is discussed in an excellent chapter.

Two hundred and twenty arterial aneurysms and five hundred and ninety-three A V Fistulae were treated in vascular centers. It is pointed out, however, that many vascular cases of this character were treated elsewhere. Anticoagulant therapy, associated with surgery is discussed. There were some failures due to not using this measure; and there were some complications due to the use of anticoagulants. This therapy has greatly extended the field of vascular surgery.

Preoperative and coincidental sympathectomy is discussed. The procedure was used extensively and its indications and limitations are considered. It was used more at some centers than at others. There were no deaths reported from sympathectomy. In the report on thromboangitis obliterans they felt that, although tobacco is not the etiological factor, no case improved while using tobacco. It seemed difficult to break these people of the habit. Most cases improved when tobacco was discontinued. Sympathectomy was used at times as a further aid in utilizing the collateral circulation. They all regressed with the use of tobacco.

They advised maintenance of arterial continuity, both by direct anastomosis or grafts, when possible. The different types of arterial repair are illustrated.

Vasospastic disorders — Raynaud's Syndrome—and other allied disorders, are discussed. There is a special chapter on post-traumatic vasomotor disorders, with a full discussion of symptoms and treatment, with interesting case reports.

Sympathectomy in circulatory diseases of the extremities is considered in a special chapter.

Anyone interested in peripheral vascular diseases should not fail to peruse this volume, as many competent authorities handled these cases and there is the best evaluation of accepted and controversial methods that can be found in one volume of the literature. —John Powers Wolff, M.D.

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"...permit ingestion of enough salt to make food palatable; without them, many patients would lose their appetites, a consequence of the salt-free diet which has occasionally been known to cause serious malnutrition."*

*Modell, W.: The Relief of Symptoms, Philadelphia, W. B. Saunders Company, 1955, pp. 265-266.

03156

PHYSICIAN PLACEMENT

The following physicians have expressed a desire to locate in Oklahoma. To the best of our knowledge, the names, addresses, qualifications and availability are current and accurate.

The asterisk beside some names indicates that additional information concerning the physician is available in this office.

Anesthesia

*Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

*Allen J. Alderman, 1104 Lincoln Drive, Great Falls, Mont., age 28, University of Nebraska, 1954, available upon release from active duty, July 1, 1956.

*Charles Dail Davenport, 814 N. Elm, Hoisington, Kansas, age 30, University of Oklahoma School of Medicine, 1953, veteran, available July, 1956.

*Jack D. Honaker, 135 Notre Dame Dr., San Antonio, Texas, age 28, University of Oklahoma, 1953, presently completing military obligation, available July 1, 1956.

*John V. Hume, 931 W. 15, Pueblo, Colo., age 31, University of Colorado 1953, residency in general practice, veteran, availability unknown.

*Elmer D. Peffly, Capt., USAF (MC) Aviation Medical Examiner, 3545th USAF Hospital, Office of the Flight Surgeon, Goodfellow Air Force Base, Texas, age 34, University of Oklahoma School of Medicine, 1953, interned at Wesley Hospital, Oklahoma City, available July, 1956.

*Wilmer G. Sheldon, 32 Williams, S. E., Minneapolis, Minn., age 33, University of Minnesota, 1955, veteran, available upon completion of internship, July, 1956.

Internal Medicine

*McCague Beardsley Copeland, Henry Ford Hospital, Detroit 2, Mich., age 30, University of Colorado, 1952, in residency at Henry Ford Hospital, veteran, available July 1, 1956.

*C. A. Loughridge, 1107 E. Upsal St., Philadelphia 19, Pa., age 36, College of Physicians and Surgeons, Columbia University 1954, in internal medicine residency at Philadelphia General Hospital, available between July and September, 1956.

*James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Orthopedics

Robert E. Landstra, American Legion Hospital for Crippled Children, 2350 Lakeview Ave., St. Petersburg, Florida, age unknown, now in orthopedic residency training, availability unknown.

Pathology

*Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, George Washington University, 1950, will finish four years pathology residency in January, 1957, will consider immediate placement if board requirements are not necessary.

Pediatrics

*David Goldstein, 66 Lafayette Ave., Staten Island 1, N. Y., age 38, Long Island College of Medicine, 1949, two year residency in pediatrics, Board certified, available after Oct. 1, 1956.

*Robert E. Gustafson, 611 Beckman Dr., Kankakee, Ill., age 36, University of Iowa, 1945, Board certified and Fellow of the the American Academy, would like to locate where he can practice and teach pediatrics, veteran, availability to be discussed.

*Leslie W. Langley, Jr., 1709 De Pauw Ave., New Albany, Ind., age 32, University of Louisville School of Medicine, 1953, now taking second year of pediatric residency, veteran, available July 1, 1956.

*Carl Frederick Wagner, 130 E. Shields, Cincinnati 20, Ohio, age 48, University of Cincinnati, 1935, interned University Hospital of Cleveland and served residency at Cincinnati, 1935, veteran, prefer clinic or associate, available May 1, 1956.

Surgery

*Albert Frederick Cunningham, U. S. Naval Hospital, Memphis, Tenn., age 35, University of Arkansas, 1947, available April 15, 1956.

*Edward Wendell Foster, 147 W. Main, Meriden, Conn., age 62, Harvard University School of Medicine, 1924, certified by specialty board, veteran, available now, would consider surgery, obs.-gyn., or general practice.

*Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available Jan. 1, 1957.

*C. Richard Jernigan, Parkland Memorial Hospital, Dallas, Texas, age 29, Southwestern Medical College 1948, will be Board qualified in General Surgery January 1, 1956, veteran, available January 1, 1956.

*Arthur Andrews McMurray, 3203-B Cherrywood, Rd., Austin 2, Texas, age 35, University of Tennessee, 1950, Board eligible in general surgery, veteran, available July, 1956.

*Boyd M. Saviers, 514 Lacewood Dr., Dallas, Texas, age 33, University of Oklahoma, 1947, finishing third year residency at Methodist Hospital of Dallas, veteran, available September, 1956.

*Richard A. Walsh, 1363-C Angel Alley, Fort Knox, Kentucky, age 31, New York University, 1948, Board eligible, presently completing military obligation, available July 1, 1956.

Urology

*Harry Emanuel Fisher, Jr., Box 161, Barnes Hospital, St. Louis 5, Missouri, age 33, University of Oklahoma, 1952, veteran, available July 1, 1956.

Woodrow Payne, M.D., 764 McConnell, Memphis, Tenn., age 34, University of Tennessee, 1944. Board Qualified in Urology, veteran, available July, 1956. (Wants city 20,000-75,000 — private proup, partnership).

*Henry Ernest Wolfe, Jr., 879 Rosewood Ave., Vallejo, Calif., age 34, Albany Medical College, 1947, board qualified in urology, available upon separation from active duty, Aug. 15, 1956.

W. Y. Cook, M.D., intern at St. Anthony Hospital, Oklahoma City. Available July 1 until October.

Locum Tenens

William Grant Blanchard, 719 Tesler Way, Seattle, Washington, University of Oklahoma, 1955, completing internship King County Hospital, would like employment prior to service, possibly six-twelve months.

B. N. Shockley, 2009 N. Pearson Dr., Midwest City 10, Oklahoma, age 27, Marquette University, 1952, will be available for seven months beginning November, 1956, or can work for a 30 day period any time prior to November.

CLASSIFIED ADS

AVAILABLE: Office equipment, established general practice. For details contact H. D. Moor, M.D., 1409 N. Portland, Oklahoma City 7, Okla. Phone WI 2-2311 between the hours of 9:00 a.m. and 6:00 p.m.

NOTICE: Physician with long established general practice in downtown medical center in Oklahoma City, who is slowing up and nearly ready to retire, has good proposition for younger general practitioner qualified for obstetrics and preferably, also some surgery. Contact Key H, care of the *Journal*.

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*Moyer, J. H., and others:
J. Chronic Dis. 2:670, 1955.

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Editorials

Cortisone and Chickenpox

In a letter to the Editor of Pediatrics, Robert J. Haggerty and R. Cannon Eley[1] report the death of two children in the last two years at Children's Medical Center, Boston, from varicella. Both children were receiving cortisone and both died in a state of shock a few days after the appearance of the vescicles. Since death from varicella is so rare they wondered about the possible relationship of cortisone and in questioning the physicians in the Boston area found another possible case; a four year old boy, who while receiving 50 mgm of cortisone daily for asthma, developed varicella and died three weeks later of acute encephalitis.

In an effort to determine whether others had had similar experience they wrote to 65 physicians engaged in teaching or private practice in this country, Canada and England. The replies were prompt and contained reports of ten additional fatalities among children who were receiving cortisone at the time they contracted varicella. Although the replies cited children who had experienced an uneventful course of varicella while receiving cortisone *in three of the fatalities cortisone had been administered because of the severe nature of the disease.*

"We have been sufficiently impressed by the potential danger of administering cortisone in the presence of varicella (even in small doses) that we now advise termination of all such therapy as rapidly as possible in susceptible children who are known to have been exposed to the disease. Fortunately the incubation period of this infection allows the gradual reduction of dosage and adequate time for the adrenal glands to resume their normal function before the infection is manifested. One physician who answered our letter and whose practice is limited to allergy, posed the question whether it might be advisable to increase the dosage of cortisone rather than omit or decrease it during this period of stress. This, as well as many other questions raised by this survey, cannot be answered with assurance. From the experimental and clinical evidence now available, it does appear that these hormones, in some instances, may adversely alter the course of varicella, and upon this basis we have felt that it is prudent to rapidly reduce, and when possible, discontinue such therapy."

(1) Pediatrics, 18:160, July, 1956

A Date for Your Calendar

Mark the second Wednesday of each month from September through June on your calendar. If you have finished that, then read the rest of this announcement. These dates will be the times for the new Monthly Short Course Series at the Postgraduate Division, University of Oklahoma Medical School. This is a new venture of the Departments of Medicine, Surgery, Pediatrics, and Postgraduate Education.

The second Wednesday of each month from 3:30 to 8:30 will be devoted to Postgraduate Medical Education. Each session will include four hours of lectures, seminars, case presentations, and discussions with a free dinner from 5:30 to 6:30.

Registration may be made with the Postgraduate Division for the entire series for $20 or for individual sessions for $3 each. Advance registration for the entire course will be appreciated.

With the same afternoon and evening each month set aside for this course, you may plan in advance your postgraduate training for the entire year and schedule office appointments accordingly. The time was selected so that physicians from all over the state can spend the morning in the office and still arrive on time. The subjects to be covered will include a diversified group of topics on current problems.

The Medical School in this venture is trying to fulfill its function as the center for medical education for the entire state. We hope you will help them by registering early for the entire series, by faithful attendance, and by helpful criticism and suggestions.—J.F.H.

Scientific Articles

THE NEPHROTIC SYNDROME

WILLIAM O. SMITH, M.D.

THE AUTHOR

William O. Smith, M.D. who edited Medical Grand Rounds entitled "The Nephrotic Syndrome," is Chief Medical Resident at the University of Oklahoma Hospitals.

Stewart Wolf, M.D.: Our patient this morning will be presented by Dr. Crosthwait.

Marion J. Crosthwait, M.D.: The patient is a 47 year old white male farmer who was admitted to University Hospital on February 16, 1956 with complaints of swelling of the feet and ankles of 14 months' duration, shortness of breath and generalized swelling for 10 to 12 months.

The patient was well until 18 months prior to admission when he developed dull, aching frontal headaches which usually occurred early in the morning and subsided during the day. Fourteen months prior to admission he noted the onset of slowly progressive pedal edema, malaise, weakness and occasional anorexia. Two to three weeks later he noted periorbital edema and edema of the hands which occurred in the morning and usually subsided during the day. At about this time he also noted nocturia and frequency, voiding as much as two liters of urine during the night. At that time he consulted a physician who made a diagnosis of Bright's disease. Twelve months prior to admission his headaches became more severe and he began having some shortness of breath on exertion. He was treated with antihypertensive drugs, a low sodium diet and digitalis. He discontinued the latter, however, when he developed nausea and vomiting. He also received five blood transfusions during the ensuing 10 months, the first three of which were accompanied by transfusion reactions, characterized by pruritis, rash, chills and fever. During the summer of 1955, he apparently had a spontaneous diuresis and lost several pounds in weight. During this time his shortness of breath markedly decreased and he felt much improved. About two months later, however, he suffered a recurrence of edema which progressed to anasarca. Five months before admission, following a transfusion, he had two convulsions in rapid succession which were characterized by jerking of the arms and hands, and deviation of the mouth and followed by loss of consciousness for 16 to 18 hours. There followed severe frontal and occipital headaches which required narcotics for relief. Two nights prior to admission the patient had an episode of nocturnal dyspnea relieved by sitting up on the side of the bed.

There was no history of gross hematuria or "smoky" urine, nor of dysuria or pyuria. The patient had no knowledge of hypertension prior to the onset of the present illness. His appetite has remained good thoughout.

PAST HISTORY: The patient had the usual childhood diseases without complications or seqeulae. Fourteen or 15 years ago there had been an episode of "kidney trouble" characterized by burning or urination and "buttermilk" at the termination of voiding. This episode lasted only a short time and cleared spontaneously.

FAMILY HISTORY: Father died of "Bright's disease". The patient was taking care of his father at the time of the onset of his present illness.

PHYSICAL EXAMINATION: The patient was a well-developed, fairly well-nourished, pale, white male with marked anasarca, experiencing slight dyspnea, but in no acute distress. The blood pressure was 190/100, the pulse 80 and regular, respirations 24 and weight 192½ lbs. Examination of the eyes revealed moderate periorbital edema

and pale conjuntivae. Fundoscopic examination showed narrowing of arterioles, exudates, flame-shaped hemorrhages and papilledema. There was pitting edema of the chest wall; the lungs were clear to asculation and percussion. The left border of cardiac dulless was in the fifth interspace in the anterior axillary line. A Grade II systolic murmur was heard in the third and fourth interspaces to the left of the sternum. Shifting dullness and a fluid wave were found in the abdomen and there was marked edema of the penis and scrotum. The skin was pale and smooth. Small ecchymotic areas were found on the dorsum of the right hand and wrist.

LABORATORY: The urine was clear amber with pH 6.6, specific gravity 1.007, 10 to 12 RBC's per high power field, 8 to 10 WBC's per high power field and 3 to 4+ proteinuria. Total urinary protein was 12.5 gms. per 24 hours. Urinary sodium was 5.2 meq. per liter and urinary potassium 24.4 meq. per liter. Culture of the urine revealed non-hemolytic staph. aureus and alpha strep. Hemogram revealed a hemoglobin of 9.1 gm., a white blood count of 6,050 with a normal differential and a sed rate of 25 mm. per hour. Blood chemistries showed a blood urea nitrogen of 43 mg. per cent, a serum cholesterol of 247 mgs. per cent and a total protein of 3.89 gms. per cent with a 2.19 to 1.70 A/G ratio. The serum sodium was 140 meq. per liter, the chlorides 130 meq. per liter, potassium 3.0 meq. per liter and a CO_2 combining power of 14.3 meq. per liter. Serum calcium was 6.0 mgs. per cent and serum phosphorus 8.6 mgs. per cent. Ceph. floc. was 1+ at 24 hours and 3+ at 48 hours.

HOSPITAL COURSE: The patient was given a 1000 mg. sodium, 100 gram protein diet. Potassium chloride 5 gr. t.i.d. was given until the serum potassium rose to within normal limits. The day following admission 1 cc. of mercuhydrin was administered and three days later 1 cc. of thiomerin. There has been a satisfactory diuresis with a weight loss of 20 pounds since admission. He also received procaine penicillin, 600,000 units every 12 hours, aspirin and codeine. Blood pressure has ranged between 220/140 and 210/100.

Doctor Wolf: Doctor Russo, are there any radiological findings of note?

Peter E. Russo, M.D.: The chest film reveals only slight enlargement of the left ventricle. The lungs appear clear.

Doctor Wolf: There is much confusion about the use of the terms "nephrosis" and "nephrotic syndrome". Indeed, the classification of and relationships involved in the various forms of Bright's disease are poorly understood. Doctor Bourdakos, would you help us place these various conditions in proper focus?

N. Bourdakos, M.D.: The term "nephrotic syndrome", may cover a rather broad area of kidney diseases which have quite different etiologies and pathological findings but which lead to the same clinical findings of massive proteinuria, low serum proteins, anasarca and hypercholesterolemia. Therefore, the clinical diagnosis of etiology in a patient showing these findings has been a confusing problem. Further confusion has arisen from the use of the pathological term "nephrosis" in such patients. This term encompasses other processes, such as acute necrotizing nephrosis or toxic nephrosis, which have no relation to the symptomatology of the nephrotic syndrome.

Let us review by the use of the chart the various types of renal diseases which may lead to the nephrotic syndrome and observe their inter-relationships.

Acute diffuse glomerulonephritis is an important member of the nephritis family. Most of the patients with acute glomerulonephritis recover completely. A few die in acute heart failure or with acute cerebral edema (pseudouremia or ecclamptic form of glomerulonephritis), usually because they have been loaded with intensive fluid therapy in an unwise attempt to force diuresis. A small percentage develop subacute glomerulonephritis. This is a well defined pathological entity. At the beginning the clinical picture is identical to that of the acute form. Later patients start to show signs of progressive renal insufficiency. Most of them die within one year or less. The cause of death, in contrast to the acute form, is always renal failure. Some patients develop chronic glomerulonephritis. After the acute stage there is a period during which the

renal lesions progress slowly. During this period the only clinical manifestation is occasional slight proteinuria. It may be many years before the full-blown picture of chronic glomerulonephritis and renal failure appear. Often the course is not so latent. Several exacerbations resembling the acute stage may occur before the final development of chronic glomerulonephritis. These latter cases have been classified by Ellis as type I chronic glomerulonephritis. With both types of progression there may be a stage where the nephrotic syndrome develops. The symptoms may be identical at this stage with those of Epstein's disease (lipoid nephrosis). Of course, if there is good evidence of nephritis such as significant hematuria, somewhat elevated blood pressure, mild or even latent renal insufficiency, eye-ground findings or only the history of an acute stage the diagnosis of glomerulonephritis is not difficult. There are many cases, however, which show none of these clues, and it is quite impossible to make a differential diagnosis at this stage between subchronic glomerulonephritis and lipoid nephrosis.

Another inflammatory type of renal lesion occurs in lupus erythematosus which may rather quickly produce the clinical features of the nephrotic syndrome. The associated skin findings, valvular heart lesions, and positive L.E. cell phenomenon aid in diagnosis here.

Under primary glomerular lesions we also see diabetic glomerulosclerosis (Kimmelstiel-Wilson's syndrome), amyloidosis and lipoid nephorsis. Lipoid nephrosis was formerly considered to be a primary disorder of tubules, but recent evidence indicates otherwise. These diseases also may lead to the nephrotic syndrome.

Finally we come to the group of primary tubular nephropathies, which is composed of toxic or ischemic lesions such as acute mercury poisoning and so-called "lower nephron nephrosis". Their pathology has been studied nicely by the microdissection technique of Oliver. Interruption of the basal membrane (tubulorrhexis) and necrosis of the tubular epithelium (tubulonecrosis) mainly of the proximal tubules are the primary lesions. It seems that toxic agents produce necrosis, while shock and ischemia result in lesions of the basal membrane. Actually, any case is inevitably a combination of both processes. The main feature in this group is acute renal failure. The features of the nephrotic syndrome are not found, except edema if the patient is overloaded with water.

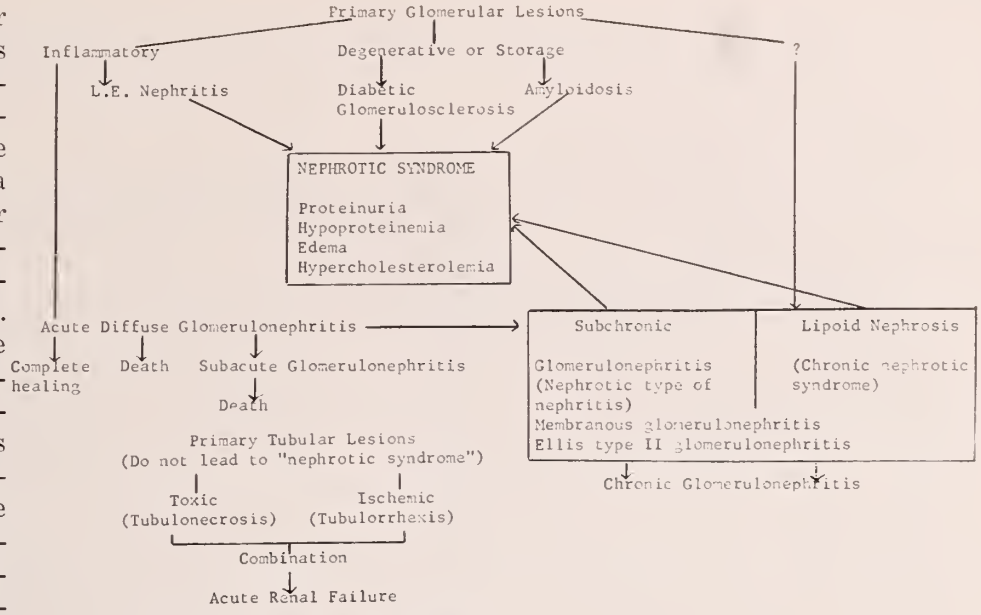
In summary, then, in the differential diagnosis of the nephrotic syndrome one must consider the nephrotic stage of chronic glomerulonephritis, L. E. nephritis, diabetic glomerulosclerosis, amyloidosis and lipoid nephrosis. The common functional disorder in these etiologically different diseases, resulting in common symptomatology, is pathological permeability in the glomerular tuft which leads to proteinuria and an important protein loss. Reabsorption of protein and lipids from the tubular lumen produces a storage of hyalin droplets and lipid substances in the tubular cells. This athrocytosis is the most evident morphologic feature of lipoid nephrosis and led to the wrong conclusion that this disease is a primary degeneration of the tubules.

In closing I should like to emphasize that pyelonephritis very often superimposes on other renal diseases such as we have been discussing. It is of greatest importance to recognize this occurrence because the infection can usually be successfully treated; unless it is vigorously treated, complicating pyelonephritis may pose a greater threat to the patient than the primary renal lesion.

Doctor Wolf: Thank you Doctor Bourdakos. As you imply, controversy over the pathology of "true nephrosis" and "nephrotic phase of renal disease" has been going on for some time. Perhaps Doctor Joel can clarify the problem further.

Walter Joel, M.D.: Acute glomerulonephritis is now considered to be an allergic disease. A history of infection with hemolytic streptococci two to three weeks previously is usually found. Let us consider for a moment the anatomical changes in this disorder. Diffuse glomerulonephritis is generally separated into three stages, acute, subacute and chronic. When we study such kidneys in the acute stage, grossly they appear swollen, pale, and sometimes spotted with small petechiae. Both kidneys are affected. Microscopically we see swollen glomeruli

which appear ischemic. There is proliferation of endothelial and epithelial cells; the membrana propria of the glomerular tufts appears swollen and all glomeruli are affected. Sometimes these membranes are hyaline and more prominent. In some cases we see even fibrinoid necrosis of the glomeruli. Bowman's space sometimes contains protein precipitates, red blood cells and white blood cells. The damage of tubules is not very remarkable. The tissue between the glomeruli, the interstitial tissue, appears less remarkable. This acute stage, or acute glomerulonephritis, affects predominantly children and young adults. In 95 per cent of the cases there is recovery without any consequences. As long as the proliferation is not exaggerated, the function of the glomerulus may be re-established.



RELATIONSHIPS IN THE NEPHROTIC SYNDROME

In the subacute stage which may follow the acute the proliferation is marked. Microscopically we see crest formation, which means proliferation of the epithelium of Bowman's capsule. Grossly, such kidneys are large, pale and edematous. The adhesions between the glomerular tufts are prominent. There is more prominence of the basal membrane and often there is more precipitation in Bowman's space. The tubules are affected, showing degeneration on the lining epithelium. This degeneration is due to a lasting ischemia which is not reversible because of exaggerated proliferative processes. The efferent vessels of the glomeruli which supply the tubular epithelium, mainly the proximal and distal parts, show narrowing of the lumen. The resulting hypoxia of the proximal tubules endangers their vital function—excretion and absorption of water, glucose, electrolytes, etc. Very often the acute stage is undetectable and then it seems that the sub-acute stage begins as such. The outcome is fatal within six months to one year.

If the acute glomerulonephritis shows no recovery, it goes into the chronic stage (4-5 per cent) which represents a kind of healing stage, in the anatomical sense. Proliferative processes dominate the picture. The kidneys are contracted, due to loss of nephrons and scar formation. One nephron after another is destroyed. This process may last for years, until nearly all nephrons are destroyed and renal failure occurs. At the same time the arterioles become thickened, which complicates the microscopic picture in such a way that the pathologist is often unable to decide whether this process is due to arteriolonephrosclerosis or chronic glomerulonephritis. These patients invariably die in uremia in a few years.

We should consider nephrosis as a nephrotic stage of glomerulonephritis even though sometimes the glomerular changes may be less apparent and the degenerative changes of the tubular apparatus more remarkable. Pathologically both kidneys are affected. Grossly they appear enlarged. The capsule strips easily. On cut surface the cortex appears broad and pale. Histologically all stages of tubular degeneration up to necrosis of the lining epithelium are seen. These changes are most severe in the proximal convoluted tubules. The interstitial tissue may show congestion and edema.

Sometimes the glomeruli appear ischemic; usually no glomerular changes are seen with ordinary stain technique.

The nephrotic concept is not well understood, but we believe that in most cases, if not all, the beginning is a mild and often undetected glomerulonephritis.

The clue is cases of glomerulonephritis and nephrosis lies in the membrana propria surrounding the basal membrane of the glomerular tufts. Certain stains are helpful in detecting the minimal changes. Further studies by electron miscroscopy may lead to a better understanding of these conditions.

Doctor Wolf: Thank you Doctor Joel. Doctor Hammarsten, into what category of diseases would you put our patient today?

James F. Hammarsten, M.D.: I would agree that this patient shows the nephrotic syndrome. I have never heard of chronic pyelonephritis producing this picture. The evidence here would point to chronic glomerulonephritis in the nephrotic phase.

Doctor Wolf: I should like to ask Doctor Conrad if it is of any importance to differentiate etiology in advanced renal disease and if, by doing so, our therapy would be influenced.

Loyal L. Conrad, M.D.: In the end stage of renal disease such a differentiation is of little practical importance. We treat the patient expectantly and symptomatically in any case. The dietary protein is regulated in accordance with the degree of azotemia and acidosis; salt and water balance is carefully regulated; anemia is corrected by transfusion when absolutely necessary; symptomatic acidosis is ameliorated with careful alkali therapy; aluminum hydroxide may be useful in lowering phosphate absorption from the gut and thereby combatting acidosis.

Early in the course of renal disease, however, it may be of the greatest importance to make an exact diagnosis. The tragic examples of untreated pyelonephritis and mismanaged "lower nephron nephrosis" point this out clearly.

Doctor Wolf: Doctor Hammarsten, recent excitement in the field of renal physiology and therapy of nephrosis has centered around adrenal steroids. Would you give us your views on their use in attempts to produce diuresis? At this time you might also discuss the pathogenesis of edema in this condition.

Doctor Hammarsten: Causation of edema in the nephrotic syndrome is still a debated matter. There are three main factors which play a role. The hypoalbuminemia is certainly of importance in lowering oncotic pressure. Recent evidence suggests that increased activity of a salt retaining hormone, aldosterone, on the renal tubules may be quite important. Lastly, increased production of antidiuretic hormone has been implicated.

It has been shown clearly now that ACTH and cortisone therapy may achieve a diuresis in a significant number of these patients. The mechanism of this effect is still unsettled as far as I know.

Doctor Wolf: Another mechanism which is also still unsettled is that of the anemia which occurs in uremia. Do you have any ideas on this, Doctor Conrad?

Doctor Conrad: No, I do not know the answer to that problem. It is generally held that there is a "toxic depression" of the bone marrow, whatever that may be. It has also been recently shown that a hemolytic component is present in some cases.

Doctor Wolf: This patient apparently had a good diuresis coincident with mercurial therapy. Is there any reason why mercurial diuretics should not be given to these patients?

Doctor Conrad: I would give them, but with some hesitancy.

Doctor Hammarsten. I would not even hesitate. The important point here is whether the mercurial is effective; if it is not, I would not persist in its use. Also, it should not be used if an imbalance of electrolytes exists.

Doctor Conrad: That is what I meant by "some hesitancy", that is, one must be sure of the electrolyte status. Considerable amounts of potassium may be lost in a mercurial induced diuresis and further complicate the picture. I did not mean to infer that I was concerned primarily about toxic effects on the tubules.

EPIDEMIC RINGWORM *of the Scalp*

ROBERT J. MORGAN, M.D.

"Dad, ringworm of the scalp apparently isn't the same as it was when you first began to practice." This statement is the thought of many doctors in Oklahoma, especially those at and near Purcell where the State Health Department has forced the isolation of over 50 public school students affected with a treatment resistant type of fungus of the scalp. "Old time" remedies such as iodine, Ammoniated Mercury, Walnut stain, Clorox, etc., do not cure these patients, even when employed by older doctors who apparently used to effect cures with them. Even newer medicines which are effective against superficial fungus infections on other parts of the body do not, in the majority of cases, effect a cure on the scalp in less than 18 months, and sometimes longer.

Most dermatologists, and others who have had training in mycology, believe that more modern and scientific methods of detection would have shown that these patients previously thought cured and non-contagious actually were still infected and capable of spreading ringworm to others. Also, the fungus most prevalent in the Purcell epidemic is one found only sporadically in Oklahoma in the past, but in recent years it has been found much more frequently when microscopic examination and cultures are obtained from infected hairs. This fungus, Microsporum audouini, is the most common cause of scalp ringworm in New York, Los Angeles, and other heavily populated areas. It is called by some "the human type" of ringworm, though it can be contacted from animals. The so called "animal type" of ringworm, Microsporum lanosum, the most common cause of ringworm of the scalp in Oklahoma, may be transmitted from person to person.

There are several other less common types, some even more resistant to treatment than the Audouini. These may last a lifetime and be transmitted from parent to child for generations, as reported previously in this journal by the author.[1] There also are types which clear up spontaneously in shorter time than our common Oklahoma Lanosum infections, which on an average last about 90 days if treated.

THE AUTHOR

Robert J. Morgan, M.D., an Oklahoma City dermatologist has prepared an article entitled "Epidemic Ringworm of the Scalp." Doctor Morgan is a graduate of the University of Oklahoma School of Medicine.

Fortunately, the two common forms of ringworm fluoresce when exposed to a Woods lamp (ultra violet light filtered through nickel and cobalt to emit a "black" light). Scales, medicines, powder, lint, etc., also fluoresce but not with the characteristic green shade that is caused by fungi. Many false-positive cases have been found where fluorescence is not green. but white or gray, and due to things other than fungus. On the other hand, some medicines applied will mask fluorescence, so that some cases are reported falsely as negative because the medicine covers up or neutralizes the green shade. Also, some cases have been reported as negative because examination has been made too soon. That is, it sometimes takes five to seven days after infection begins for the infected hairs to fluoresce because the focus of infection is below the surface of the scalp. There are some types of fungus infections of the scalp that do not fluoresce at all, but fortunately they are relatively rare. Where a doubt exists about the presence of ringworm, all questionable hairs should be examined under a microscope and cultured on Sabouraud's media. Fungi in hairs are very characteristic, so that when present one can be certain it is a fungus infection on immediate examination, but it usually requires a growth of seven to ten days on media to tell which fungus is present.

The duration of fungus infection depends on several factors other than the type of fungus present. Among those factors are:

(1) The amount of inflammation accompanying the infection; roughly, the more the

inflammation, the shorter the duration. Inflammation is not always good, however, because the more the inflammation, the more likely there is to be permanent baldness.

(2) The age of the patient; roughly, the nearer the patient is to adolescence, the shorter the duration. This is not always true, because one 12 year old patient, just past menarche, had her infection over two years, and a four month old infant developed an inflammatory kerion and was free of infected hairs, microscopically and by fluorescene, in four months. Adults get ringworm caused by these common fungi, but very seldom in the scalp until senescence, when they again are as susceptible as children. One question that this imposes is: Why not treat these patients with maturation sex hormones? This has been attempted many times by Reiss and others, and so far it has been unsuccessful.

(3) Type of medicines used: There are many antifungus remedies, all of which are effective if they come in contact with the fungus. The problem is to get the medicine down into the hair follicle and in contact with the fungus in the hair. The author uses a "wetting agent," Sodium Lauryl Sulfate, with brisk rubbing of the medicine into the affected areas to aid in overcoming this problem.

X-Ray Epilation

Throughout the country it is conceded that the most efficient therapeutic measure in the treatment of Tinea capitis due to Audouini and other resistant fungi is with Roentgen ray epilation. In New York and in most areas where it is prevalent, x-ray therapy is routine in those children who qualify for this treatment. What is the purpose of x-ray epilation and how does it work? Before a hair is shed from a hair follicle, normally a new hair has developed and is present at its side in direct contact with the old hair. If the old hair is infected, then infection passes directly to the new hair, hence the infection can, theoretically, last indefinitely unless the old and the new hair are sluffed out spontaneously or due to medicinal irritation.

The alternative is to carefully give x-ray therapy over the entire scalp, a procedure perfected by Kienbock and Adamson, and *retard* the growth of the new hair for one or two months, so that transmission of infection will be interrupted. Contrary to popular belief, x-ray therapy in this manner does not kill the fungus, but merely prevents its spread to new hairs. X-ray therapy strong enough to kill the fungi also would be strong enough to be injurious to the scalp. Also, contrary to popular belief in Oklahoma, there is relatively little danger of having permanent baldness if epilation is done properly by experienced dermatologist. Since there are so few physicians in Oklahoma qualified to do x-ray epilation, the State Health Department cannot recommend this therapy and was, therefore, compelled to establish some form of isolation of the afflicted which may last four or five years.

In non-epidemic areas, as in Oklahoma City, the Health Department recommends that the child affected with ringworm of any type may be allowed to go to school if the head is covered at all times with a stocking-cap-like garment and an anti-fungal medicine is applied until the patient has three weekly negative examinations by a competent mycologist.

To answer anticipated questions on Roentgen ray therapy, the children must be very quiet while this is being administered, since there is an overlapping of radiation fields. Sometimes sedation is necessary before treatment is started. By using the Keinbock-Adamson Technique, hundreds of cases in the New York area are epilated each year and none have permanent baldness. Only those which were mishandled before the technique was developed have had any difficulty of this type. When x-ray is properly administered the hair continues to grow for a short time, then sometime between the 15th and 25th day a general defluveum of hair takes place. Within the next 10 days all of the hair comes out of the scalp, leaving it entirely bald. Three hundred to four hundred Roentgen Units are used per area, depending on the age of the patient. The head remains bald for one and one-half to two months, sometimes slightly longer, then new hairs will begin to grow. Until there is a complete loss of hair antifungal medicines are employed. This procedure is not 100 per cent successful, but usually if there are

resistant infected hairs, they are relatively few in number, perhaps six or eight, and these may be removed by desiccating the hair follicle, much in the same manner ladies have their superfluous hair removed by electrolysis. Some patients, as reported by dermatologists in Texas, have had as many as three x-ray epilations without having permanent baldness.

Summary

It is suggested that as an answer as to why your treatments may have failed and so that epidemics such as now exist in Purcell can be avoided, the following routine is suggested:

(1) The scalp should be examined under the Woods lamp to see if there is a greenish fluorescence of the hairs.

(2) Questionable hairs, flourescent or otherwise, should be examined directly under the miscroscope using 10 per cent Sodium or Potassium Hydroxide to clear the hair, then observe for fungus mycelia and spores. Cultures should be made from these infected hairs to determine which fungus is present, and when it is determined which is present, the parents should be advised as to the expected outcome. A medicine should be used which will not only kill the fungus when coming in direct contact with it, but which can be incorporated into wetting agent so that it will penetrate the hair follicle and stimulate some inflammation. The scalp should be shampooed daily so that infected hairs and scales will be washed off. The child should wear a stocking cap day and night to prevent spreading the infection to other children and to prevent spreading it over his own body.

Public Health Aspects

Tinea capitis should be made a reportable disease. When an epidemic is suspected, city-wide survey of all school children should be made. Cultures should be performed before isolation or Roentgen epilation is administered. Barbers should be told about the epidemic and cautioned to be on the look-out for lesions of the scalp. The barbers should be prohibited from cutting the hair of a child who has or is suspected of having ringworm infection. (There is no known simple chemical method of sterilizing a barber's clippers.) Children should wear hats as a precaution against infection in public places such as picture shows, churches, buses, etc. Infected dogs, cats and other animals should not be allowed near children. Their infected hairs and scales should be destroyed, if possible, before children are allowed to play in an area where an infected animal has been. It is recommended that no child be permitted to return to school without adequate coverage of the infected areas until he is entirely free of the infection—at least three examinations with negative results one week apart should be obtained before the child can be considered cured.

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Small Plastic Plug Replaces Silver Tracheotomy Tube

The ungainly and uncomfortable silver tube used to maintain an airway in postpoliomyelitic patients has, in some cases, been replaced by a small inconspicuous plastic plug.

Drs. Henry J. Jacobs and John E. Affeldt, Hondo, Calif., reported in the (June 30) Journal of the American Medical Association on the use of the plug in 114 postpoliomyelitic patients.

The tube or plug is used to prevent healing and closure of an artificial opening, called a tracheostoma, in the trachea. The opening, made through the throat, allows paralytic patients to breathe.

The new plug overcomes several disadvantages of the older open silver tube. The plug is smaller and made of polyethylene plastic which does not cause a tissue reaction or leave a bad taste or odor. The plug, held in place by a chain or tape tied around the neck, facilitates neck movements. Because it does not touch the back of the trachea, it gives some patients the feeling that air is obtained more readily.

"A beneficial cosmetic effect" from the new plug is noted among women patients. It is smaller and its color makes it less conspicuous than the silver tube, they said.

Special Article

The Prevention and Treatment of INJURIES *to* ATHLETES

DON H. O'DONOGHUE, M.D.

THE AUTHOR

Don H. O'Donoghue, M.D., an Oklahoma City orthopedist, has prepared a series of articles on athletic injuries. This is the last of three articles which has appeared in this journal. Doctor O'Donoghue was graduated from the University of Iowa School of Medicine and is Certified by the Board of Orthopedic Surgery.

The two previous articles in this series have dealt with the justification for athletic programs and primarily with the extremely important phase of prevention of athletic injuries which of course would be the ultimate goal in any program. If the injury cannot be prevented, what things must be done to minimize the effects of the injury. What treatment can be carried out by the doctor to accomplish this end?

Early Detection of Injury

If injury cannot be prevented, the first important step is early detection of the nature and degree of the injury. The golden time to examine an athlete for injury is *at the time he is hurt*. Frequently, this first examination is by the coach or the trainer. He must conscientiously and *objectively* examine the player to determine as well as is possible the extent of his injury. Is it serious enough that he should be removed from the game? Should he be seen by a physician? May he be strapped up and returned to competition? To err is human but the margin of error can be drastically reduced by a realistic consideration of the individual injury. Wishful thinking has no place in evaluation of injury since too much is at stake. The player is eager to continue and should not be deprived unnecessarily of this privilege. Still it is better to err on the side of conservatism since a little time will usually solve the problem.

If the injury sidelines the player, what then? If the program does not include a skilled trainer, by all means the injured person should be examined by a physician at once. When you, the physician, are called, what then? If you are to treat injuries you must form the habit of early examination. The too prevalent custom of packing in ice, or strapping until the next day is a dangerous one. Frequently, prompt, careful examination will make the diagnosis easy. Several hours, or days, later swelling, edema, hemorrhage and pain may make it very much more difficult to reach an accurate evaluation of the location and extent of the injury.

So, the first step in a successful program is early examination and prompt treatment. The habit of treating Saturday's injuries on Monday is to be deplored. Once treatment is decided upon, carry it our confidently. If consultation with a specialist is needed, seek it promptly so that the specialist too may be able to take advantage of the optimum time for treatment. Once treatment is instituted, it should be carried out to its completion, with no compromise because of extrinsic pressures.

The following concepts of treatment have been found by me to be of great value:

1. The goal must be complete recovery. I have heard learned doctors say that following a severe injury a player should not expect nor indeed be permitted to return to competition. This is specious reasoning. To many an athlete this means a complete change in his career. Would you blithely tell a medical student or interne to change his career if you, by a better effort, could make such a change unnecessary? These boys are entitled to medicine's best effort.

2. Avoid expediency. Too often the decision as to treatment may be unduly influenced by immediate considerations. The player's desire to compete, over-optimism, failure to recognize impending permanent disability, interference with school attendance, even convenience may be the deciding factor when objective medical evaluation should rule.

3. The *best* treatment must be done. This seems rather obvious but often we find ourselves saying, "Well, that ligament should be repaired but—". That fateful "but" may make the difference between some lesser percent of recovery and return to normalcy.

4. The physician must acknowledge the *importance* of restoring competitive ability to the player. If he does not, he has no business treating athletic injuries. A concert pianist would not trust his hands to one who believed that piano playing is unimportant. A vital link is formed between patient and doctor when there is unanimity of opinion as to the importance of the goal sought.

5. Treatment must be prompt. Unnecessary delay, once decision has been reached, or in fact, unnecessary delay in making a decision is not compatible with good results. We have been able to show conclusively that delay very often spells the difference between success and failure of treatment.

But hold! Will such a program be accepted? Certainly, but not without some time and effort on the part of the doctor. He must be able to show conclusively that the program is better, not for the doctor, but for the school, the coach, and especially for the player himself. This *may* require educative effort, it *will* require time. The doctor himself must be prepared to cooperate fully with ability and interest. Then, as the doctor improves his program, the trainers and coaches will see the result. The injured knee regains unimpaired function. The sprained ankle responds to treatment and a short complete lay off is followed by normal function as opposed to a limping, ineffectual season.

The coach will note that prompt treatment restores the player more rapidly in the long run. Usually, the substitute is a more effective player than the crippled star. So, rehabilitation of the star is worth a period away from the game.

The player will not fear the doctor who has a sympathetic and understanding attitude. He notes that his buddy gets well. He soon takes treatment for granted. He expects to get well. The player will accept your recommendation for treatment, and you must be prepared to take the responsibility for it.

These are not idle dreams of Utopia. This can be done and has been done. It must be our aim to make it the rule, not the exception. Nor does it require a full scale, university type, training program. It does require an able, conscientious coach, and a physician who will interest himself in the peculiar problem of the athlete.

It is obviously impossible to detail here treatment for all the various injuries to which an athlete is subject. However, I would like to discuss in some detail the treatment of one of the most common—ankle sprain. By analogy this can be used as an example for the treatment of other injuries.

One of the most frequent injuries to athletes is the "sprained ankle". As has been noted, careful taping (Fig. 3) and wrapping (Fig. 2)of the ankle will serve to minimize the injury and usually prevent complete ligament rupture or dislocation. However, the foot and ankle are quite susceptible to inversion injury resulting in some degree of damage to the lateral ligament.

Suppose our athlete remains on the ground clutching his foot and complaining of his leg and foot. What do we do next? Of course, the coach or trainer will see him first. He must decide if it is a simple muscle cramp or a major ligament injury. To play it safe, he pulls him out of the game and examines him at leisure. Perhaps the physician will see him now. What to do? When the physician first sees him, be it at that time or within the next several hours, a careful, complete examination must be made to determine the location and degree of injury. In order to clarify our thinking on any individual case, it is wise to classify ankle sprains into *mild, moderate,* and *severe.*

A mild ankle sprain is one in which there has been a partial tear of some element of the ligament but without any actual weak-

ening of strength of the involved structure. Here we find rather minimal symptoms. The swelling will be slight. Tenderness will be localized. There will be mild disability. The player will probably jump to his feet and try to exercise his ankle to "work it out". Careful examination will reveal no abnormal motion, some pain on reproduction of the force of the sprain, usually inversion, and x-ray will of course be negative. This is the case where no very extensive treatment is necessary and is the type which gives such dramatic results from some one of the local treatments which have been popularized in the past few years. In this type of case, if there is a local swelling, local tenderness, the doctor can inject the area with novocain and hyaluronidase to diffuse the hematoma. The ankle can be effectively strapped (Fig. 4) and activity allowed at once, even to the extent of letting the athlete resume playing. This of course, presumes an accurate and correct diagnosis that there is no real weakness of the ligament. Probably, a safer procedure would be to carry out this treatment, strap him up (Fig. 4), and limit his activities for a day or so while encouraging him to be on his foot. Local application of ice is not necessary, but will relieve the pain if pain is an element. Adequate strapping should be carried out until the tenderness has completely disappeared. This type of case presents no problem once diagnosed. The big problem is to be sure that it is a *mild* sprain and that you are not treating a severe injury while laboring under the misapprehension that it is of little consequence.

The second classification of sprain is a *Moderate Ankle Sprain*, in which there is an actual tear of a single fasciculus or several fasciculi of the ligament but in which the ligament is not completely torn. This includes a large group with a wide difference in degree of injury since for the ligament to prevent abnormal motion, it need have only a relatively small part of its substance intact. The history will usually reveal that there has been a sharp inverson of the ankle. The player will fall to the ground with immediate, severe, pain. He may be able to stand and put his weight directly on it but any effort of actual function will be quite painful, particularly if the ankle or foot tend to fall into inversion and plantar flexion. Swelling is prompt and severe as hemorrhage takes place through the lacerated ligament area. On examining the player, in the very early stage, there will be rather sharply localized tenderness with marked pain on inversion of the foot. Swelling rapidly supervenes and may be quite diffuse all over the top of the foot and on the lateral



Fig 1

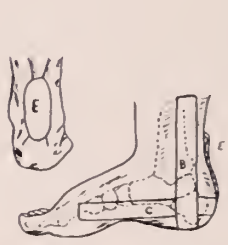


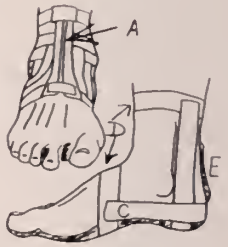
Fig 2



Fig 3


Fig 4





The Louisiana wrap requires a 100" web ankle wrap. Figue 1 is the start (A) of the wrap, crossing the top of the ankle above the lateral malleolus (B), around under the heel from the inner side (C). Figure 2 crosses the dorsum of the foot (D) around the inner side of the ankle above the internal malleolus (E). Figure 3 crosses the outside of the heel under the plantar surface of the foot (F) to terminate at (G) the starting point. The wrap then continues until the bandage is exhausted with suitable overlapping of the turns so that one turn is not directly superimposed over the one beneath it. This application should be made snugly but not tight enough to interfere with circulation. It may be made over a heavy sock, care being taken to avoid wrinkles. A little practice will determine the degree of tension necessary.

Illustrating two basic principles of the basket weave or gibney type of taping. For preventive strapping, the tape should be about as high as remedial strapping for an ankle sprain, the vertical the athlete intends to run.*

*Training Room Manual, Cramer's of Gardner, Kans.

side. Soon vessel spasm and edema spread throughout the area of tenderness so that the whole side of the ankle and foot is painful. The location of the sprain can be determined early by pin point location of the tenderness. This is not possible after a few hours. Any attempt at motion is painful, but in the early stage motion not causing strain on the torn ligament will be pain free. X-ray will be of no value unless it happens to show a sprain-fracture where a portion of bone has been torn off with the ligament. There will be no abnormal motion demonstrable by x-ray.

Treatment of such a condition must go far beyond that of a mild sprain where the aim is largely relief of the symptoms. There are two elements in treatment. One is to relieve the present injury, the second to prevent further injury. The ligament may have lost 80 per cent of its strength and slight further injury may result in complete laceration. Local treatment in this type is extremely valuable also. Injection of the area early with novocain and hyaluronidase will reduce the swelling and prevent extensive swelling and expedite recovery. Injection should be done only by the physician. However, great care must be taken that the local injection, by screening the symptoms, does not also screen the degree of injury. Your judgment as to the degree of injury must be based on the symptoms before the injection rather than after because such a case injected and then permitted to return to play may actually suffer a very serious injury, even dislocation of the ankle. Local treatment in such a case should *not* be followed by early ambulation. The general regime would be for the doctor to infiltrate the area with novocain and hyaluronidase. Then apply bandage with moderate pressure and enclose in an extensive ice pack. The use of an ice pack for 12 to 24 hours will markedly shorten the recovery period, the hyaluronidase on the one hand permits diffusion of the blood, the ice pack prevents increased bleeding. Nor does this mean simply placing an ice bag on the foot, the extremity should be packed in ice, either directly on the skin, or directly over the pressure bandage, care being taken that the pressure bandage is not too tight. As soon as the swelling is controlled, the ankle should be adequately splinted. To some degree the extent of the injury can be determined in the next few days by the amount of local reaction. In the ordinary case, splinting should be continued for a few days until the swelling subsides. At this time, if further evaluation reveals that there has been actual ligament damage, a walking cast should be applied. The point may be made that this is unnecessarily disabling. However, if the person has had a bad sprain of the ankle, the disability is essentially complete for the first couple of weeks anyway. No amount of strapping or encouragement to function is going to actually result in function to the extent of participation in sports. *Complete* rest for a shorter period of time will be well worth while, not only in shortening the period of mobility, but in diminishing the chance of any permanent disability.

Following the removal of the walking cast after 7-10 days, if there is still local tenderness the ankle should be adequately strapped. Very careful protective strapping should be continued until all the symptoms have completely subsided. By virtue of the fact that the patient has been walking all the time, his rehabilitation will be rapid.

If the original injury is treated thus adequately, there is little reason to fear the recurring ankle sprain which is so commonly seen and which can be so extremely disabling to one who needs strong stable ankles.

The third class of ankle injuries is *Severe Ankle Sprain.* This consists of an injury in which there has been a complete tearing of the lateral ligament. The findings here will be essentially that of the more extreme type of moderate sprain; that is, tenderness, swelling, pain on reproduction of the force of the injury, but all these symptoms will be more severe. Disability will be immediate, although here too direct weight bearing may not of necessity be particularly painful. If examination is carried out very early, abnormal motion can be demonstrated and x-ray picture will often help determining whether the ankle actually rocks open laterally (Fig. V). X-ray with similar degree of tension made on the injured ankle compared to a picture of its fellow may readily show hypermobility permitted by the tearing

of the ligament. Here too, the injection of novocain and hyaluronidase is advisable to speed up the absorption of blood. After novocain has been infiltrated, more careful examination may elicit motion, since pain will be minimized.

Fortunately, this degree of tear of the ankle is not frequent in athletes, since the ankle strapping and wrapping serves to prevent the extreme displacement which causes this type of injury. However, it does happen sometimes with complete tearing away of the ankle wraps or strapping.

It should be borne in mind that the x-ray may well be negative if careful positioning of the patient is not made to show the abnormal degree of motion (Fig. VII). In the inversion type of injury, there will be a rocking open motion of the lateral part of the ankle.

In an eversion injury, there will be a separation of the ankle mortise by virtue of the fibula moving away from the tibia, the talus being displaced laterally on the internal malleolus and tibia (Fig. VI).

This severe type presents a very serious problem for treatment and we are coming more and more to the conclusion in the ankle, as we have so definitely shown at the knee, that the best treatment is early and complete repair of the involved ligament. If this is to be done, it should be decided promptly and done at once. Surgical repair certainly will serve to minimize the period of disability and also to assure complete recovery. Should non-surgical treatment be elected, then treatment again should be local injection, support, ice packing, and when the swelling in controlled, splints followed by walking cast. It will be necessary to wear the cast considerably longer and to keep the strapping on considerably longer in these cases of complete severence of the ligament.

It should be re-emphasized that surgery in these cases should not be left to the last resort. If the ligament is permitted to heal before it is decided that surgery is necessary, the surgical procedure must be a reconstruction, which is very much less successful than a repair. The tendency of a ligament completely torn is to retract, with the ends folding in on themselves, sometimes being actually caught in the joint. Even if the ligament does repair completely, it will frequently repair too long and the result will be an unstable ankle, ill fitted to the arduousness of an athletic career.

In all these ankle injuries, rehabilitation is an important factor. Obviously in a mild type of sprain the rehabilitation is carried out by early weight bearing and very little restriction of activity. In the more damaging ankle injury, the rehabilitative period must be somewhat dependent upon the length of time that immobilization has been necessary. It has been mentioned above that use of a walking cast prevents atrophy of the other muscles of the extremity. Quadriceps exercises are readily done with the foot in the cast, the cast providing the necessary weight for resistance to the quadriceps. When the cast is removed, rehabilitation can be concentrated on the ankle and should consist of resistive exercises to the limit of tolerance with a gradual increasing of the weight not omitting the adjuncts of heat and massage and other circulatory stimulants.

If surgery has been carried out, ordinarily the cast will be removed at the end of about three weeks and rehabilitation can be begun promptly. In fact, rehabilitation following surgery for repair of the ligaments can begin much more promptly than it can where non-surgical treatment has been employed. It has frequently been said that a ligament injury is worse than a fracture. This, of course, is a finger directly pointed at the fact sprains are less adequately treated than fractures. If our ligament injuries are treated with as much painstaking care as our fractures, we will find that we will get as good, if not better, results.

A careful history of that case having painful recurrent sprains of the ankle to the point where the athletic ability is markedly impaired, will usually reveal that there has been an inadequately treated sprain of that ankle sometime in the past.

Postscript

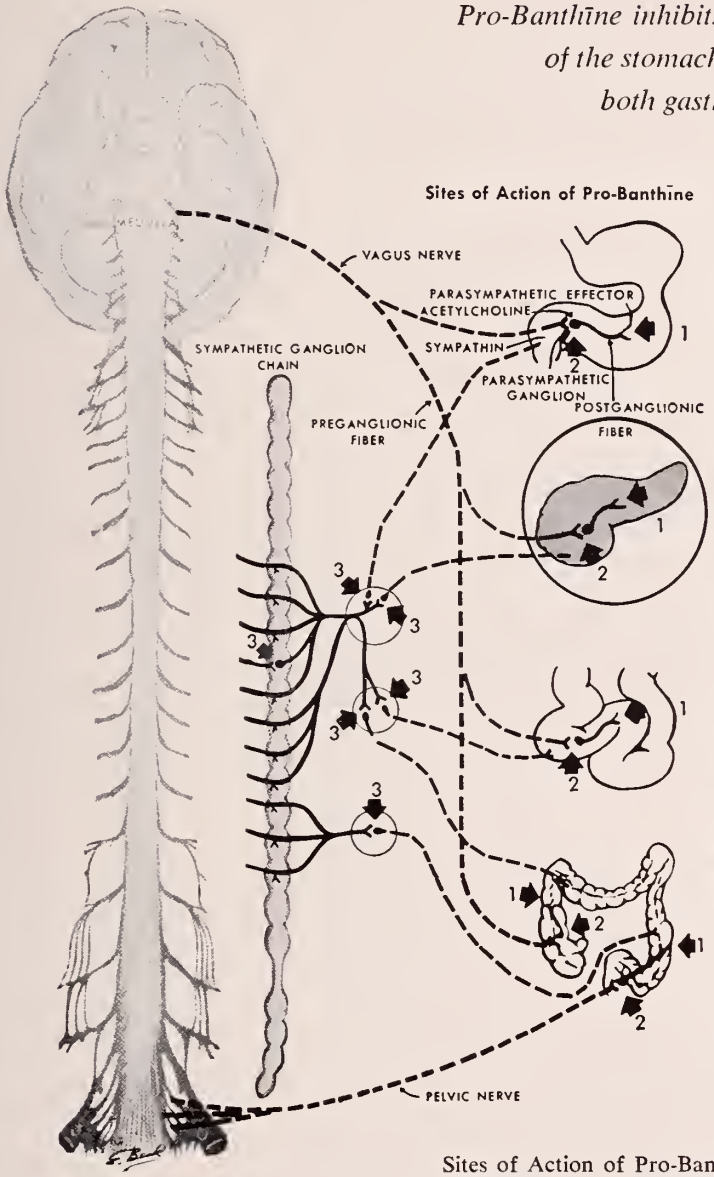
The shortcomings of this series of articles on the prevention and treatment of athletic injuries is wholly recognized. There has been no intention to completely cover the field of treatment of athletic injuries. The

(Continued on Page 310)

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1. Jones, C. A.: Arch. Int. Med. *96*:332 (Sept.) 1955.
2. Zollinger, R. M.: Postgrad. Med. *15*: 323 (April) 1954.
3. Woodward, E. R.: M. Clin. North America *38*:115 (Jan.) 1954.
4. Schwartz, I. R., and Hinton, J. W.: Personal communication, February, 1955.

Sites of Action of Pro-Banthine. *The principal site of action of Pro-Banthine is on the parasympathetic system where it exerts a dual action while exerting a single and lesser action on the sympathetic system: (1) parasympathetic effector; (2) parasympathetic ganglion; (3) sympathetic ganglion (see arrows).*

SEARLE

PRESIDENT'S LETTER

I hesitate to append the letter concerning education, knowing full well I may meet with a more humiliating death than did Biblical Stephen. But, the fan mail was so terrific—three letters—I must accede to the demands of my ego.

"Why Johnny Can't Read" has caused a worthwhile stir over the country. Able psychologists tell us that the I.Q. of youngsters is higher than ever. If that premise is true, then Johnny can't because he has never been, is not being, and probably won't be, stimulated by we parents. Youngsters have a keen curiosity which we stifle by no's or indifferent answers. A little of this and they take the high road. We must learn what type of reading our child enjoys. This may cost us a television program or two. Then, we must see to it that well written books along the desired lines are constantly within reach. Good books arouse curiosity. If he wonders, say, about embalming, get a book on the subject. The author may mention how they did it in Pharaoh's time. Another book concerning the history of Egypt is now necessary, and so on, ad infinitum, and, what do you know, we have an internationally known archeologist in our home. It is possible, and if we do not accept possibilities and risks in lieu of certainties—ho, hum.

We must consult with the teachers, and **accept** qualified opinions—this may be painful. We must learn our youngsters' capabilities—more pain—but we **must** be honest with the child, then—two and two makes four. We must then insist that their qualifications and abilities be taxed to the limit. It is less painful to learn in youth than to be ignorant in age. If it develops that our youngster is capable of training only, I assure you our schools are **loaded** with vocational instructors, but we must take this warning—all evidence at hand strongly suggests that handicraft production is meaningless in an industrial society, except as a hobby or therapy. If there is a possibility that "Johnny" might be the recipient of an education, then he must study the basic and fundamental subjects, with emphasis on the spoken and printed word, i.e., composition, driving technique, vocational math, psychology, problems of democracy, et cetera, are all fine for extra work, but should not be accepted, and are not by the better colleges, as graduating credits. Then when Johnny comes home belly-achin' about the tough teachers, we should rush to the school and congratulate them. The teachers have been encouraged to play it safe, even though it had meant putting blinders on the students. If discipline is maintained in the home and classroom, if the material is adequately presented in the school, if studies are complemented by outside reading, then and then only will "Johnny Read."

Above all we must let our children "grow up" naturally — they become worldly wise soon enough—instead of loading them with social obligations so that in our mind's eye, they appear POPULAR.

Educators as a group seem to lack the necessary vision, courage, energy and FUNDS. This may sound like a blanket condemnation . They have not been able to obtain the necessary assistance or support from the helter, skeltering, scurrying American families—there is a great demand for baby sitters. So, like tumbling tumbleweeds, they have just drifted along and "Johnny Can't Read."

Concerning the financial structure of our schools in Oklahoma, moneys must be obtained—not found—at once so that we may enter the competitive makets for educators. This is easily outlined on paper but our legislators are gun shy. 1. Remove the homestead exemption law—compromises can be made if proved necessary. 2. Equalize pre-assessment of property. 3. The tax and profit on liquor sold from package stores could be earmarked for our educational system. A change in the Constitution would be necessary but no constitution can remain adequate forever.

I am not a paragon—just a maker of mistakes.

Tom McClure M.D.

President

anxiety is part of **EVERY ILLNESS**[1]

The physically sick patient faces two stresses—the sickness and the anxiety that it brings.[1] All too often, the anxiety is a threat to the patient's progress. It may intensify symptoms, give uncertainty to therapy, and impair rapport.

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1. Braceland, F.J.: Texas State J. Med. 51:287 (June) 1955.
2. Lemere, F.: Northwest Med. 54:1098 (Oct.) 1955.



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Injuries to Athletes

(Continued from Page 306)

major aim has been to emphasize again the extreme importance of adequate programs for the care of athletes and to deplore the too causal, more or less self regulated, training regimes which are present in so many athletic setups.

We wish to compliment the coaches and trainers and the personnel of the schools in general for a sincere effort to improve the situation. Many of the colleges and some high schools in Oklahoma have very excellent and adequate programs and it is our hope that these programs can be gradually extended into more of the schools. The financial problem has been helped some by the improving extent of the insurance coverage of most of the athletes in schools of the State. Certainly these insurance companies are vitally interested in prevention. It may be that support can be obtained from some association of insurance carriers to finance educative and adequate preventive programs. As has been so aptly said, we have never truly solved a problem until we have learned how to prevent it.

Finally, I would like to pay a tribute to the steadily improving program at our own University of Oklahoma. Director Bud Wilkinson and his staff have at all times had as their greatest interest, the welfare of the individual players on their squads. I have never known of an instance where they would willingly allow a player to participate to his detriment, or of a case where they failed to heed the recommendation of the trainer or physician as to whether or not a player was physically able to go. The Training Department under Mr. Ken Rawlinson is indeed a stimulation. I would wholeheartedly recommend to anyone really interested in setting up a better program that they use it as an example of true cooperation between coach, trainer, and physician.

The physical condition of our youth is vital to the welfare of our country. We must steadily push forward toward its improvement.

HAVE YOU HEARD?

A. L. JOHNSON, M.D., was elected medical chief of staff of Park View hospital in El Reno at the regular monthly medical staff meeting.

J. T. PHELPS, M.D., was selected as vice chief of staff, and O. J. HAKE, M.D., was elected secretary. All three officers will serve during the fiscal year of 1956-1957.

CHARLES ED WHITE, M.D. received notice of his election to the American College of Obstetrics and Gynecology.

JACK D. HONAKER, M.D. entered the general practice of medicine and surgery as a partner of GEORGE A. TALLANT at the Frederick Clinic in Frederick, Okla.

WILLIAM L. BOND, M.D., Oklahoma City, has recently been certified by the American Board of Obstetrics and Gynecology.

ROBERT H. ADAMS, M.D., Oklahoma City, recently received a Fellowship in the American Industrial Medical Association.

ROBERT L. ANDERSON, M.D., Tulsa, ROBERT H. FURMAN, M.D., and WANN LANGSTON, M.D., recently received their Certificates of Fellowship in the American College of Chest Physicians.

Colorado State Medical Association Meet Set

Members of the Oklahoma State Medical Association are invited to attend the Colorado State Medical Society's 86th Annual Session to be held September 5-8, 1956 at the Stanley Hotel, Estes Park, Colorado.

Eight distinguished guest speakers will address the assembly.

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REPORT ON ACTIONS OF A.M.A.

John F. Burton, M.D., Oklahoma City, was elected to the Council on Medical Service of the American Medical Association at the 105th Annual Meeting held June 11-15 in Chicago. Doctor Burton succeeds the late A. C. Scott, Jr., M.D., of Texas. Among the major subjects acted upon by the House of Delegates of the A.M.A. were hospital accreditation, evaluation of graduates of foreign medical schools, private practice by medical school faculty members, federal aid to medical education and premature publicity on new drugs.

David B. Allman, M.D., surgeon of Atlantic City, N.J., was named unanimously as president-elect for the coming year. He will succeed Dwight H. Murray, M.D., of Napa, Calif.

The House of Delegates selected Doctor Walter L. Bierring of Des Moines, Iowa, as recipient of the 1956 Distinguished Service Award of the American Medical Association. A past president of the A.M.A., he was honored for his achievements in the fields of public health and medical examining board work.

Total registration at the end of the fourth day of the meeting, with half a day still to go, had reached 22,394, including 9,793 practicing physicians and 12,601 residents, interns, medical students and guests.

Hospital Accreditation

The House of Delegates approved the report of the Committee to Review the Functions of the Joint Commission on Accreditation of Hospitals, which was appointed by the Speaker as a result of action taken at the June, 1955, meeting. The Committee came to the following conclusions:

1. Accreditation of hospitals should be continued.

2. The Joint Commission should maintain its present organizational representation.

3. The Board of Trustees should report annually to the House of Delegates on the activities of the Joint Commission.

4. Physicians should be on the administrative bodies of hospitals.

5. General practice sections in hospitals should be encouraged.

6. Staff meetings required by the Joint Commission are acceptable, but attendance requirements should be set up locally and not by the Commission.

7. The Joint Commission should not concern itself with the number of hospital staffs to which a physician may belong.

8. The Joint Commission is not and should not be punitive.

9. The Joint Commission should publicize the method of appeal to hospitals that fail to receive accreditation.

10. Reports on surveys should be sent to both administrator and chief of staff of hospital.

11. Surveyors should be directly employed and supervised by the Joint Commission.

12. Surveyors should work with both administrator and staff.

13. New surveyors should receive better indoctrination.

14. Blue Cross and other associations should be requested not to suspend full benefits to non-accredited hospitals until those so requesting have been inspected.

15. The American Medical Association should conduct an educational campaign for doctors relative to the functions and operations of the Joint Commission.

16. The Committee also suggests that the American Medical Association and the American Hospital Association encourage educational meetings for hospital boards of trustees and administrators either on state or national levels to acquaint these bodies with the functions of accreditation.

17. This Committee asks to be discharged upon submission of this report to the House of Delegates.

The House also approved a reference committee suggestion that the following statement be added to strengthen the report:

The Committee recommends that the commissioners to the Joint Commission on Accreditation of Hospitals, appointed by the Board of Trustees of the American Medical Association, urge that Commission to study:

1. The problems of the exclusion from hospitals and arbitrary limitation of the hospital privileges of the general practitioner, and

2. Methods whereby the following stated principles may be achieved:

The privileges of each member of the medical staff shall be determined on the basis of professional qualifications and demonstrated ability.

Personnel of each service or department shall be qualified by training and demonstrated competence, and shall be granted privileges commensurate with their individual abilities.

Graduates of Foreign Schools

The House of Delegates approved in principle a program for the evaluation of graduates of foreign medical schools seeking hospital positions in the United States. The proposed program was developed by the Cooperating Committee on Graduates of Foreign Medical Schools, representing the A.M.A. Council on Medical Education and Hospitals, American Hospital Association, Association of American Medical Colleges and Federation of State Medical Boards of the United States.

The following principles were emphasized by the Council on Medical Education and Hospitals in its report recommending A.M.A. paticipation in the program:

1. Although the responsibility to share educational opportunities in medicine is recognized, the primary concern must be for the health care of the American public. Thus, before assuming responsibility for the care of patients as interns or residents, all graduates of foreign medical schools (immigrants, exchange students and American graduates of foreign medical schools) should give evidence, as nearly as can be measured, of having reached a level of educational attainment comparable to that of students in American schools at the time of graduation.

2. The primary objection of this Committee is to devise an effective mechanism for measuring educational attainment in the absence of intimate and continuing knowledge of the educational background of foreign-trained physicians.

3. It is not intended that this mechanism be applicable to those foreign medical school graduates in this country as temporary students participating in programs of medical and related studies in recognized universities, medical schools and postgraduate schools, who by the very nature of their study are not involved in the responsibility of patient care.

The proposed plan calls for establishment of a central administrative organization to evaluate the medical credentials of foreign trained physicians desiring to serve as interns or residents in American hospitals.

Private Practice by Medical School Faculty Members

Another major action by the House involved the problem of private practice by medical school faculty members, which has been under study by the Committee on Medical and Related Facilities of the Council on Medical Service.

Federal Aid to Medical Schools

One of the most controversial subjects of debate on the floor of the House was a resolution expressing strong opposition to S. 1323, a bill in Congress providing for one-time, matching grants to medical schools for construction purposes. The Association in recent years has been supporting such legislation in principle, with certain reservations concerning details of some provisions. The House reaffirmed that policy by approving a reference committee statement which said:

"We appreciate the intent with which this resolution was introduced, but at the same time we feel that there are many economic and geographical factors involved, which might not make this resolution practical on a national level. Inasmuch as no evidence was offered to this Committee to justify a

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change in the previously declared policy of the House of Delegates, your Committee recommends that this resolution be not adopted."

Premature Drug Publicity

The House adopted a substitute resolution which read in part:

. . . In view of the tremendous number of new drugs being developed and the expanding research programs in medical colleges, clinics and hospitals being financed by the drug industry, it is imperative that the manufacturer and the medical profession develop cooperatively guiding principles which will protect the American people from being subjected to the premature release of information pertaining to new products or techniques.

Miscellaneous Actions

Among many other actions on a wide variety of subjects, the House also:

Approved a Board of Trustees statement on Social Security which included the following: "It is imperative that we distinguish clearly between this problem of coverage of physicians and the far more dangerous disability proposal."

Authorized the Committee on Federal Medical Services to make a continuing study of all aspects of VA medical activities under the basic policy established in June, 1953, and suggested reconsideration of the temporary exceptions made at that time with respect to neuropsychiatric and tuberculous disorders.

Recommended that the Board of Trustees select New York City as the place of the 1961 annual meeting.

Opening Session

At the Monday opening session Doctor Elmer Hess, outgoing A.M.A. President, warned that the medical profession must be prepared to face an all-out drive by some labor groups for national compulsory health insurance. Doctor Dwight H. Murray, then President-Elect, told the House that general practitioners and specialists must guard against "any cleavage within our profession," and he urged strength through unity.

Doctor Lowell T. Coggeshall, special assistant to Secretary Marion B. Folsom of the U. S. Department of Health, Education and Welfare, assured the House that the over-all medical objectives of HEW are in accord with those of the A.M.A.

Hathaway and Cox Honored

W. G. Hathaway, M.D., Lone Grove, and J. L. Cox, M.D., Ardmore were presented life memberships in the Oklahoma State Medical Association in recognition of 50 years of active practice in the field of medicine.

M. E. Robberson, M.D., Wynnewood, district vice councilor of the Oklahoma State Medical Association presented the certificates.

Doctor Cox graduated from the University of Tennessee School of Medicine, Memphis, Tenn., in 1906 and began his practice at McMillan in Marshall County soon after. He came to Ardmore the following year.

Doctor Hathaway received his medical degree from the University of Arkansas, Fayetteville. He practiced at Provence and Pooleville before going to Lone Grove.



Pictured left to right is W. G. Hathaway, M.D., Lone Grove; J. L. Cox, M.D., Ardmore and M. E. Robberson, M.D., Wynnewood, presenting the life memberships.



"I'll take care of that later . . ."

He was a wonderful husband and father, a great doctor, a man who was extremely meticulous in everything he did—except in his planning for his family's future in the event of his death. In this respect he became the victim of procrastination—"I'll take care of that later."

What he could have accomplished so easily now becomes the biggest problem his wife will ever have to face—there is no semblance of order in the estate he left, in fact his widow has no assurance at this moment that she will even be able to provide an education for the children. The expenses of settlement of the doctor's estate will run as high as one-third of all he left! Indeed, the price of neglect in this case will run much higher than the doctor ever realized because—"I'll take care of that later."

Have you provided for the protection and security of your family, Doctor? If you have neglected the vitally important business of arranging for the transfer of your estate in the event of your death, don't delay another day! Our Trust Department will be happy to discuss this urgent matter with you immediately. Now—today—call REgent 6-1531 and ask for our Mr. Scott. He will be happy to call on you at your convenience.



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500 Participate in Group Life Program

Approximately 500 members of the Oklahoma, State Medical Association elected to qualify for the group life insurance program with the Massachusetts Mutual Life Insurance Company. The program, which became effective March 15, provides group life insurance for $10,000 for those members under age 60 and $7,500 for those beyond that age up to attaining age 65. In addition, the plan provides accidental death benefits, dismemberment provisions and waiver of premium in the event of total disability.

Each member can automatically convert his policy to any permanent plan of insurance in the event of termination of membership or upon attaining age 65.

New members of the Association are eligible without a physical examination if application is made within 30 days after becoming a member. Those who are now members of the Association can apply for this coverage, which would become effective on the 15th of the month, on the basis of a health statement. Those over 40 can qualify after securing a physical examination.

Inquiries concerning this program should be addressed to: J. Hawley Wilson, CLU, c/o Oklahoma State Medical Association Insurance Trust, 1240 First National Building, Oklahoma City, Okla.

Psychiatrists Elect Officers

Milford S. Ungerman, M.D., of Tulsa was elected President of the Oklahoma Society of Neurologists and Psychiatrists and the Oklahoma District Branch of the American Psychiatric Association for the year 1956-1957.

Other officers include: John Gray, M.D. of Tulsa, Vice-President; Harold Sleeper, M.D., Oklahoma City, President Elect; and Charles A. Smith, M.D., of Norman, Secretary and Treasurer.

Hayden H. Donahue, M.D., Oklahoma City will serve as delegate and Doctor E. P. Henry of Tulsa as alternate delegate for the District Branch.

The Executive committee member is Doctor H. F. Flanigin of Tulsa.

31 Counties Pay Building Fund Assessment

Since the passage of the $35.00 Building Fund Assessment by the House of Delegates in May, 1955, 31 counties have paid in full. The Assessment was imposed upon all dues paying members in order to construct a new state headquarters building without having to borrow money and paying thousands of dollars in interest.

The following counties have reached the 100 per cent paid mark:

Adair	Hughes	Nowata
Atoka	Johnston	Pittsburg
Beaver	Kingfisher	Pushmataha
Blaine	Kiowa	Roger-Mills
Caddo	Lincoln	Rogers
Choctaw	Love	Sequoyah
Coal	Major	Tillman
Delaware	Mayes	Wagoner
Ellis	McClain	Washington
Greer	McCurtain	Woodward
Harmon	Noble	

Percentage-wise, the half-dues paying members have been most responsive to their obilgation. Although they are required to pay only half of the Assessment, in accordance with the Constitution and By-Laws, 142 out of 153 have already remitted their checks. This figure represents 93 per cent of the total number of this membership classification.

Oklahoma and Tulsa Counties are running very close on the full assessment from a percentage standpoint, having 83 per cent and 80 per cent of their respective memberships paid in full. In the counties other than Oklahoma and Tulsa, 80 per cent of the membership has made its contribution, which brings the state-wide percentage to approximately 82 per cent.

Many physicians have expressed unusual interest in the construction of the new building. Contributions have been received from numerous Honorary and Life Members who were not obligated by the House of Delegates to pay any portion of the Assessment. Also, there have been many physicians who have contributed more to the fund than their man datory obligation.

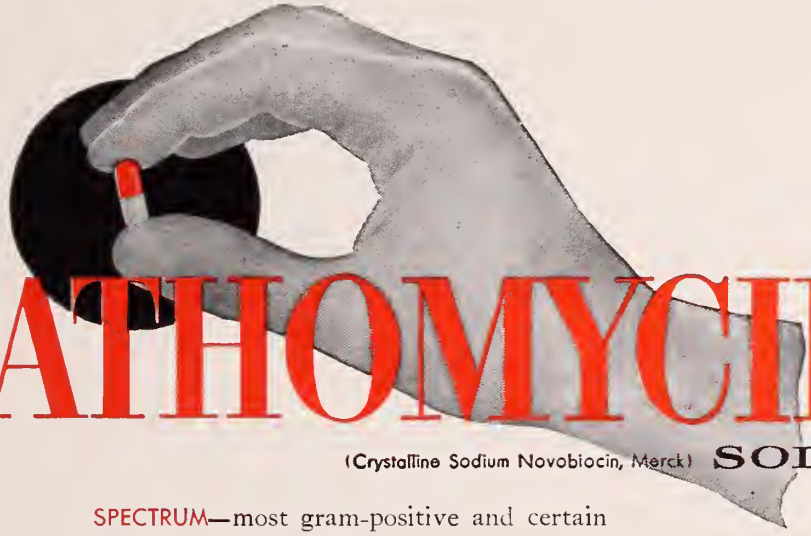
Collection of the Assessment is now being turned over to the secretaries of the county medical societies. Under the Constitution and By-Laws, the secretaries will be unable to accept 1957 dues from any unpaid member.

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A.M.A Board Approves Foreign Medical School Aid

At a recent meeting of the American Medical Association Board of Trustees the Board approved the long-sought program for evaluating foreign medical school graduates and also the planning for the administration of a program as proposed by a Cooperating Committee on Graduates of Foreign Medical Schools.

The Committee was composed of representatives of the A.M.A. Council on Medical Education and Hospitals, the Federation of State Medical Boards of the U.S., the American Hospital Association and the Association of American Medical Colleges.

After almost two years of intensive study, the Committee submitted its final report which has already received favorable action from all of the four parent organizations.

The proposed program is designated to clear up two important facts regarding each foreign medical graduate who wishes to come to the United States as an intern or resident or in any other position that involves medical care of the American public:

1. The medical credentials of a bona-fide medical school.
2. By examination, a foreign medical graduate must demonstrate that he has medical knowledge equivalent to that demanded of graduates of schools in the United States.

It is planned that this evaulation service will be established within an independent organization whose affairs will be directed by a Board of Trustees designated by the four organizations. The Committee hopes that this planning will be implemented shortly so that the evaluation service can become an effective mechanism within the next year.

There has been a continuing influx of foreign-trained physicians to the United States for a long time. At present, there are more than 6,000 such physicians in this country on temporary visas serving as interns or residents. It is estimated that more than half of this group entered during the past year and the remainder represent those who have been here for more than a year. All foreign-trained physicians here on temporary visas are supposed to return to their native countries on completion of their internship or residency training.

Two Oklahoma Communities Get Aid From Medical Practice Loans

Local physicians in Drumright and Skiatook, Oklahoma have received grants from the Sears-Roebuck foundation to assist in building their medical facilities.

These grants were made under the 1955 plan of assistance which the foundation, in cooperation with the American Medical Association, introduced last September. The foundation grants long-term, unsecured loans to physicians to supplement their personal funds or local financing which cannot cover the entire cost of starting practice.

The screening and selection of applicants is done by a 17-member advisory board of physicians from all sections of the country, named by the A.M.A. board of trustees.

Loans last year went to 18 doctors who are setting up 10 practice units in eight states.

These loans have been established in small towns in northern Georgia, southwest Colorado, northern Texas, southwest Michigan, southeast New York, Connecticut and Seattle, Washington.

There are two kinds of loans: one brings medical care and facilities to communities where none exists, and one retains existing care and facilities in communities about to lose them.

In the future more emphasis will be placed on helping doctors locate in communities without medical care.

Requests for assistance will be evaluated on professional qualifications of the applicant, the availability of medical service in the community, the extent of community participation in establishing the proposed unit and the soundness of the plans proposed for providing medical care.

In addition, there is another group of approximately 1,000 foreign-trained physicians who enter each year as immigrants or as American citizens returning after completing their medical education abroad.

F. A. Hudson Awarded Honorary Membership



"In Recognition of the Distinguished Service in the Practice of His Profession," Doctor F. A. Hudson was awarded an Honorary membership in the Oklahoma State Medical Association.

The certificate in the form of a plaque was presented to Doctor Hudson at his home May 23.

Pictured left to right: C. M. Hodgson, M.D., Councilor; George Ross, M.D., President, Garfield-Kingfisher County Medical Society; R. C. Baker, M.D., Secretary of the Society and F. A. Hudson, M.D., (seated). Others present included his family and Henry T. Russell, M.D., Vice-Councilor and a few intimate friends.

At the request of Doctor Ross, Councilor Hodgson delegated the authority of presentation of the award to Doctor Baker, a fellow Honorary member. Doctor Baker reviewed briefly the services of Doctor Hudson and his accomplishments during his medical career in Enid.

Doctor Hudson has been practically in full retirement since March 13, 1952 when he incurred a fractured hip in a fall.

Bacon Made Honorary Member

O. G. Bacon, M.D., Frederick, was made honorary lifetime member of the Rotary club.

Doctor Bacon is completing 50 years as a physician and was also awarded a plaque in commemoration of services which included the delivery of over 5,000 Tillman county babies.

Doctor Bacon completed medical school at Louisville, Kentucky in 1907 and began practicing at Davidson the following year.

After serving in World War I he moved to Frederick in 1920.

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A voluntary hospital providing the care and treatment of nervous and mental patients, and associate conditions.

Deaths

Clifford C. Fulton, M.D.
1902-1956

Clifford C. Fulton, M.D., Oklahoma City physician and surgeon, died June 22 in the Medical Research hospital.

Doctor Fulton was born in Atoka September 21, 1902, and was a graduate of the University of Oklahoma and the Rush Medical School, Chicago, Illinois.

Doctor Fulton was a member of St. Paul's Episcopal church, the Oklahoma City Golf and Country club, the Men's Dinner club, and served as a captain in the Navy in World War II.

He was also a member of the American Board of Surgery, the National Board of Medical Examiners and a fellow of the American College of Surgeons.

Charles Byron Hill
1870-1956

Charles Byron Hill, M.D., long-time Guthrie physician and surgeon, died June 26.

Doctor Hill was born December 1, 1870 in Marshall County, Illinois and was a graduate of Kansas City Medical college and served in the Missouri Regimental Hospital corps during the Spanish-American War.

He was a member of Albert Pike Lodge No. 162, a 33rd degree Mason and a member of the Oklahoma Consistory.

Guy Perry McNaughton, M.D.
1887-1956

Guy Perry McNaughton, M.D., Miami, physician, passed away May 21.

Doctor McNaughton was born December 18, 1887 in Miami. He graduated from the Memphis Hospital Medical College in Memphis, Tennessee and did his internship at Rockefeller Institute in New York.

George M. Rahhal
1917-1956

George M. Rahhal, Atoka physician, passed away June 27 after several months illness.

Doctor Rahhal became head physician at the Oklahoma penitentiary after serving in the U. S. Army as Captain. In 1950 he came to Atoka.

Doctor Rahhal was born at Mardjuan, Lebanon and came to the U. S. in 1938 and was naturalized in Oklahoma City in 1944.

Survivors included his wife, two sons, three brothers, and three sisters.

William James Rogers
1872-1956

William James Rogers, M.D., Connersville, died June 6.

Doctor Rogers was born at Marietta, Mississippi and practiced medicine in Connersville since 1897.

Survivors included his two daughters, three sons and one brother.

Harry Dillman Boswell
1883-1956

Harry Dillman Boswell, M.D., long-time Henryetta physician, died July 4, after a long illness.

Doctor Boswell was born in Naponee, Nebraska February 25, 1883 and came to Henryetta in 1917. He received a Bachelor of Science Degree from Nebraska State University in 1908 and a medical degree from Northwestern Medical School at Chicago in 1912. His first practice was in Bradford, Illinois.

Doctor Boswell was a member of the American Medical Association, past president of the Rotary club and of the Okmulgee County Medical Society and a member of the American Legion.

William J. Bryan, Jr., M.D.
1896-1956

William J. Bryan, Jr., M.D., retired Tulsa physician, died July 4 after several months of illness.

Doctor Bryan was born in Abilene, Texas and graduated from Washington and Lee University and the Baylor University medical school. He studied post graduate work at Johns Hopkins University, Baltimore, at Boston University and the University of Vienna.

He was a fellow in the American College of Physicians and in the American Geriatrics College. He was certified by the American Board of Internal Medicine and a member of the American Dibetic Association.



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In meeting the nutritional needs of formula-fed infants, the methods used are dependent upon the digestive capacity and tolerance of each infant.

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Either light or dark Karo may be used in prescribing formulas for infants because of equivalent digestive and nutritive values. Each fluid ounce (2 tablespoonfuls) yields 120 calories.

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ACHROMYCIN can be of service to you because of these important advantages:

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ACHROMYCIN Tetracycline with STRESS FORMULA VITAMINS for severe or prolonged illness. Attacks the infection—defends the patient—hastens normal recovery. Offered in Capsules of 250 mg. and in an Oral Suspension, 125 mg. per 5 cc. teaspoonful.



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Multiple Compressed Tablets

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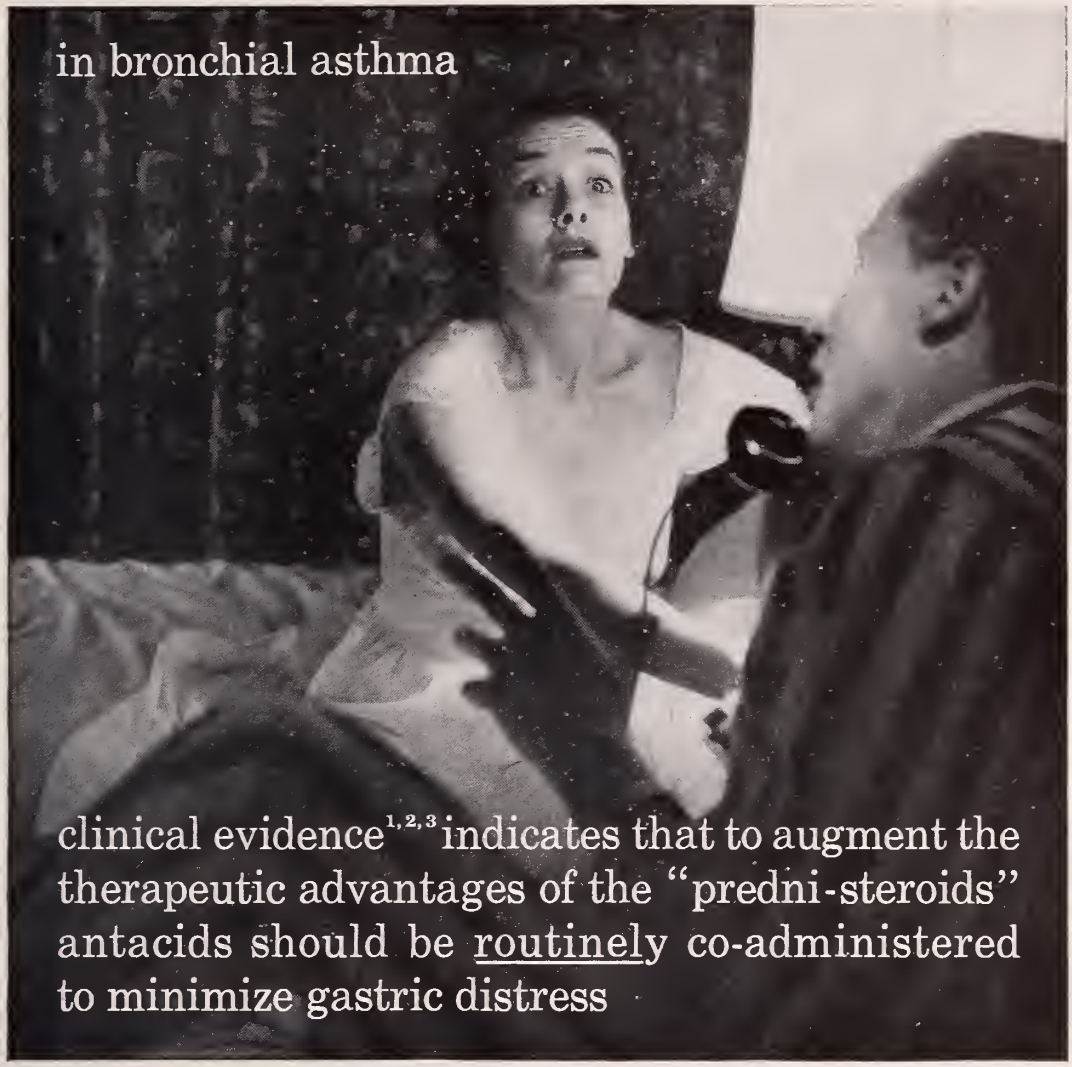
2.5 mg. or 5 mg. prednisone or prednisolone with 50 mg. magnesium trisilicate and 300 mg. aluminum hydroxide gel.

Clinical evidence[1,2,3] indicates that to augment the therapeutic advantages of prednisone and prednisolone, antacids should be *routinely* co-administered to minimize gastric distress.

References: 1. Boland, E. W., *J.A.M.A.* 160:613, (February 25,) 1956. 2. Margolis, H. M. *et al*, *J.A.M.A.* 158:454, (June 11,) 1955. 3. Bollet, A. J. *et al*, *J.A.M.A.* 158:459, (June 11,) 1955.

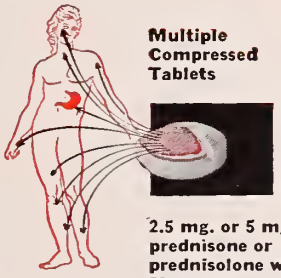
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References: 1. Boland, E. W., *J.A.M.A.* **160**:613, (February 25,) 1956. 2. Margolis, H. M. *et al*, *J.A.M.A.* **158**:454, (June 11,) 1955. 3. Bollet, A. J. *et al*, *J.A.M.A.* **158**:459, (June 11,) 1955.

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PROCEEDINGS OF THE HOUSE OF DELEGATES
of the
OKLAHOMA STATE MEDICAL ASSOCIATION

CLOSING SESSION

The Closing session of the 63rd Annual Session of the House of Delegates of the Oklahoma State Medical Association was called to order at 7:30 p.m., in the Hall of Mirrors, Municipal Auditorium, Oklahoma City, Oklahoma, Sunday, May 6, by the Speaker of the House, Clinton Gallaher, M.D., Shawnee.

The Credentials Committee reported a quorum present.

Doctor Gallaher advised that he had been informed that the nomination of the 7th Councilor District for Vice-Councilor was not in order as the nominee was not in residence in that District, and that it would be necessary for the delegates from the 7th District to caucus again and submit another name for Vice-Councilor.

Doctor Gallaher called for the introduction of additional guests. None were presented.

The Speaker then announced that in the Reporting of the Committees at the afternoon session, one had been overlooked. This was the report of the Special Committee appointed to study the operation of the Grievance Committee.

Doctor Gallaher called upon George Garrison, M.D., Oklahoma City, Chairman of the Committee to Study the Operation of the Grievance Committee. Doctor Garrison made the following report.

REPORT OF COMMITTEE TO STUDY OPERATION OF GRIEVANCE COMMITTEE

Oklahoma Stote Medicol Association

Your Committee makes the following recommendations:

1. The name will remain the same—Grievance Committee of Oklahoma State Medical Association.

2. Increase the number of members of this committee to seven. There shall be a regular monthly date of meeting.

3. In order to increase the number of members and to provide better geographical distribution we would suggest that two councilor districts as they now exist be combined for the purpose of making seven areas in the State. One member of this committee shall be selected from each of the new areas. To accomplish this we would combine present councilor districts 1 and 9, 2 and 8, 3 and 4, 5 and 14, 13 and 12, 11 and 10, 6 and 7.

4. The term of members shall be for three years except for the initial appointments which will be staggered one, two and three years with the provision that no member shall serve more than two consecutive terms. Appointment to fill out an unexpired term and the original shorter terms shall not be considered as a regular term in this calculation.

5. Selection of the members of this committee shall be made by the executive committee of the council with due consideration being given to experience in the affairs of medical organization in Oklahoma. Judicial temperament, geographical location (urban, rural), type of practice, and age.

6. Eligibility—members of the O.S.M.A. are not eligible to sit on the Grievance Committee unless they have had ten years of membership in the O.S.M.A. and have held some official position in the local or state organization.

7. The member representing the district from which a grievance is filed shall not have a vote on the case but should sit in on the hearing and discussion to answer questions and to represent the interests of the physician charged.

8. The committee shall, at its discretion, appoint a non-voting physician member to act as secretary.

9. When a matter is referred to a local component society, that society shall within 30 days report its findings, and disposition back to the Grievance Committee. If the State Grievance Committee is not satisfied that the matter has been properly adjudicated, it shall then refer the case to the Council with recommendations.

10. The committee feels that the failure of a society member to respond to a request for appearance before the Grivance Committee shall be cause for citation of contempt and shall be referred to the Council.

11. The committee recommends an amendment to Chapter 7, Section 5, of the Bylaws, concerning the duties of the council to accept complaints referred by the Grievance Committee.

12. Publicity—Your committee feels the paragraph titled "Publicity" in the pamphlet of the A.M.A. entitled *"Guides for Medical Society Grievance Committees,"* page 14, be followed in our publicity efforts.

In an effort to carry out these recommendations, we are submitting herewith copies of amendments to the by-laws which are pertinent to this report.

George H. Garrison, M.D.
Alfred T. Baker, M.D.
Ralph A. McGill, M.D.
Frank Nelson, M.D.
Wayne Starkey, M.D.

At the conclusion of the report Joe Duer, M.D., Woodward, moved: "That the report be amended to change the word 'may' to 'shall' have a medical secretary."

Motion seconded and carried.

Marshall O. Hart, M.D., Tulsa, moved "To amend the filing of grievance cases to limit the filing to the aggrieved party or in the case of a minor or incompetent, to the parent or guardian."

Motion seconded but did not carry.

Doctor Garrison moved the adoption of the Committee Report as Amended. Motion seconded and carried unanimously.

The next item of business was the report of the Resolutions Committee. John Burton, M.D., Oklahoma City, Chairman of the Committee, made the Report:

Doctor Burton read the following Resolution which was submitted by Oklahoma County Medical Society:

RESOLUTION

WHEREAS, the Oklahoma State Program for aid to those with defective or absent vision, has improved remarkably in the past 18 years, to the point where such program is considered a model for other states, and

WHEREAS, such improvement is in great part due to the untiring efforts of the State Supervising Ophthalmologist, Dr. Tullos O. Coston,

THEREFORE, BE IT RESOLVED that the Oklahoma State Medical Association does hereby commend Dr. Tullos O. Coston for exceptionally meritorious service to the people of the State of Oklahoma and especially to the deserving blind, and

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association recommend that Dr. Tullos O. Coston be continued in his present duties in relation to such a worthy cause, and

BE IT FURTHER RESOLVED, that a copy of this resolution be sent to the Governor of the State of Oklahoma, to the Oklahoma State Director of Public Welfare, and to the Oklahoma State Commisioner of Public Health.

Doctor Burton moved the adoption of this resolution. Motion seconded and carried.

Doctor Burton read the following Resolution, submitted by the Tulsa County Medical Society:

WHEREAS, it has come to the attention of the Oklahoma State Medical Association that the House of Delegates of the American Medical Association may discuss an increase in A.M.A. dues at its meeting in June, 1956, at Chicago, Illinois, and

WHEREAS, it is understood that only eighteen of the fifty-one state and territorial constituent medical associations have compulsory payment of the annual membership dues of the American Medical Association, and

WHEREAS, it is understood that approximately thirty per cent or more of American doctors who are members of county and state medical associations do not pay A.M.A. dues,

NOW THEREFORE, BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association instruct its duly elected delegates to the American Medical Association to firmly oppose any increase in the annual membership dues of the American Medical Association in 1956 or any future time, so long as the payment of A.M.A. dues continues to remain optional with the great majority of the members of state and territorial constituent medical associations, and that they be instructed to so vote on all questions calling for an increase of A.M.A. dues, and,

BE IT FURTHER RESOLVED, That the delegates to the American Medical Association from



the Emblems of RELIABLE PROTECTION

We cordially invite your inquiry for application for membership which affords protection against loss of income from accident and sickness as well as benefits for hospital expenses for you and all your dependents.

ALL PREMIUMS COME FROM PHYSICIANS SURGEONS DENTISTS ALL BENEFITS GO TO

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the Oklahoma State Medical Association make a formal report of the action, if any, in this matter at the 1956 meeting of the A.M.A. House of Delegates, said report to be rendered to the Council of the Oklahoma State Medical Association at the first appropriate meeting.

Doctor Burton moved the adoption of this Resolution. Motion seconded and carried unanimously.

Next was a Resolution from Washington-Nowata County Medical Society:

RESOLUTION

WHEREAS, there has been some question of the efficiency of the State Health Department in distributing Salk Vaccine, and

WHEREAS, many people have expressed a desire to secure these innoculations in private physicians offices rather than in public clinics;

THEREFORE, BE IT RESOLVED that this Association recommends that the State Health Department retain only enough Salk vaccine for innoculation of the indigent and return all others to the Pharmaceutical houses for distribution to private physicians.

Doctor Burton advised that the Committee felt that the intent of this Resolution had been covered in the report of the Council and therefore, approved the idea but rejected the Resolution. He moved the approval of this action of the Committee. Motion seconded and carried.

Doctor Burton read the next Resolution:

RESOLUTION IN REFERENCE TO VETERANS AFFAIRS

WHEREAS, in many Veterans Administration hospitals the full time Medical staff employees are rendering bills to patients treated in the Veterans Hospitals who are covered by Workmen's Compensation insurance and also by private medical and hospital insurance, and

WHEREAS, these fees collected are placed in various funds for the benefit of the staff, and

WHEREAS, these benefits could well be supplied by the individual employees from his salary as his brother physicians in private practice are compelled to do, and

WHEREAS, according to V. A. Reg. 6047-D 1, only veterans are eligible for treatment of non-service connected disability in veterans hospitals that are financially unable to pay,

NOW THEREFORE BE IT RESOLVED, that the Oklahoma State Medical Association's House of Delegates go on record as considering these procedures unlawful and in direct violation of V. A. Reg. 6047-D 1, and

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association instruct its delegates to the American Medical Association to bring this Resolution to the House of Delegates of the American Medical Association with the request that the Board of Trustees be requested to immediately appoint a Committee to confer with the Veterans Administration to stop this vicious procedure and report back to the House of Delegates at its next meeting.

Doctor Burton moved the adoption of this Resolution. Motion seconded and carried.

Doctor Burton read the next Resolution which was submitted by Canadian County Medical Society:

VETERANS CARE OF COMPENSATION CASES RESOLUTION

WHEREAS it is the proposed purpose of the Veterans Administration to treat the medical condition of veterans with service connected disabilities, and

WHEREAS they have been treating veterans with non-service connected disabilities when bed space is available, and

WHEREAS the Veterans Administration has been accepting patients in the State of Oklahoma covered by Workmen's Compensation,

BE IT HEREBY RESOLVED that the Oklahoma State Medical Association goes on record as opposing the Veterans Administration treating veterans covered by Workmen's Compensation, and

BE IT FURTHER RESOLVED that any member of the Oklahoma State Medical Association who participates in the Veterans Administration program which treats veterans covered by Workmen's Compensation, shall be guilty of unethical practice and subject to all the rules and regulations governing unethical practice.

Doctor Burton moved the acceptance of this Resolution. Motion seconded and carried.

Next was a Resolution submitted by the Associations of Radiologists, Pathologists and Anesthesiologists:

RESOLUTION

WHEREAS, the American Medical Association has emphasized that the practice of Pathology, Radiology and Anesthesiology are specialized branches of the practice of medicine, and

organomercurial diuretics
"...permit ingestion of enough salt to make food palatable; without them, many patients would lose their appetites, a consequence of the salt-free diet which has occasionally been known to cause serious malnutrition."*

*Madell, W.: The Relief of Symptoms, Philadelphia, W. B. Saunders Company, 1955, pp. 265-266.

03155

WHEREAS, lay organizations, including hospitals, cannot lawfully practice medicine in the State of Oklahoma or employ physicians to practice medicine in their behalf, and

WHEREAS, many state Attorney Generals have rendered opinions that salaried employment of Pathologists, Radiologists, and/or Anesthesiologists by hospitals or lay organizations, for the purpose of performing these specialized professional services, constitutes the unlawful practice of medicine by the hospital or by the institution so involved, and

WHEREAS services performed by Pathologists, Radiologists, and/or Anesthesiologists to or for the patient should be classified as unalterably professional in type, irrespective of individual contractual arrangements made between these physicians and individual hospitals, and

WHEREAS, the Oklahoma Blue Cross Plan has progressively broadened their benefits to include ever-increasing segments of these professional servcises, thereby degrading these professional services to the level of any other service performed by a non-professional paid hospital employee, and

WHEREAS, the recent announcement by the Oklahoma Blue Cross Plan to the effect that benefits will be increased to include "tissue examination" which is the last remaining vestige of professional service rendered by the Pathologist, and

WHEREAS, the inclusion of ALL clinical and surgical pathology under Blue Cross benefits which, by definition, covers no PROFESSIONAL Services, necessarily implies that these services are no greater than any non-professional service performed by the hospital, and

WHEREAS, by this method any other professional medical service can be reduced to a status wherein it is compensible by hospital service plans,

NOW, THEREFORE BE IT RESOLVED that the House of Delegates of the Oklahoma State Medical Association, duly assembled in Oklahoma City, Oklahoma, May 6, 1956, officially deplores and condemns ANY inclusion of professional medical services under Blue Cross benefits, irrespective of contractural arrangements between any physician and hospital, and unless such professional services are removed from the present or any future Blue Cross contracts, then the Oklahoma State Medical Association will withdraw its sponsorship of the Oklahoma Blue Cross Plan.

Doctor Burton advised that the Committee wished to modify the Resolution and make the last paragraph read as follows:

"NOW, THEREFORE, BE IT RESOLVED that the House of Delegates of the Oklahoma State Medical Association, duly assembled in Oklahoma City, Oklahoma, May 6, 1956, officially deplores and condemns ANY inclusion of professional medical services under Blue Cross benefits."

Doctor Burton moved the adoption of this Resolution as amended.

Wayne Starkey, M.D., Altus, offered a substitute motion: "BE IT RESOLVED that it be unlawful for any Radiologist, Pathologist, or Anesthesiologist to enter into a contract with a hospital to render any professional services."

After some discussion Doctor Starkey reworded his motion: "That it be unethical practice for any member of the profession to render service to a hospital and be paid by the hospital and let the hospital collect for it, where it may be interpreted as the hospital practicing medicine."

After further discussion Doctor A. F. Baker moved: "That the amendment to the original motion be tabled." Motion did not carry.

A vote was taken on Doctor Starkey's Amended motion. It did not carry.

The speaker called for a vote on the original motion for adoption of the Resolution as amended by the Committee. The motion carried.

Doctor Burton moved the approval of the Report as a whole. Motion seconded and carried.

The next item on the agenda was the report of the Committee on Constitution and Bylaws.

Doctor E. H. Shuller, Chairman of the Committee made the report. He called to the attention of the House that changes in the Constitution could only be presented at this meeting and held over to the next meeting of the House of Delegates for final action.

Doctor Shuller presented the first proposed amendment to the Constitution:

"Article V—Section 1—House of Delegates

Amend the Section by adding after the words "The Oklahoma Delegates" and before the word "to", the following: "and Alternates".

He moved the adoption of this amendment. Motion seconded and carried.

Doctor Shuller read the next Amendment to the Constitution.

"Article VI—Section 1—The Council

The Council shall consist of one Councilor and one Vice-Councilor elected from each Councilor District, the President, President-elect, Secretary-Treasurer, Speaker of the House of Delegates, Vice-Speaker of the House of Delegates and the Delegates and Alternates of the Oklahoma State Medical Association to the American Medical Association."

Joe Duer, M.D., moved: "That the Vice-President be included." Motion seconded and carried.

Doctor Shuller moved the adoption of the Amendment as amended. Motion seconded and carried.

Doctor Shuller read the next Amendment which has been submitted:

Amendment to the By-laws—Individual Duties of Councilors, Chapter VII—Section 4

"Amend Section 4 by adding the following words to the Title: 'and Vice-Councilors'."

Amend the section by adding the following sentence at the end of the paragraph: "He may delegate or ask the assistance of the Vice-Councilor in the exercising of these duties."

Doctor Shuller advised the Committee recommended deleting the last paragraph and adding the following:

"The Vice-Councilor, on request of the Councilor, shall assist him in exercising his duties."

R. W. Goen, M.D., Tulsa, moved "That the motion be tabled until final action on the Constitution was voted on." Motion seconded and carried.

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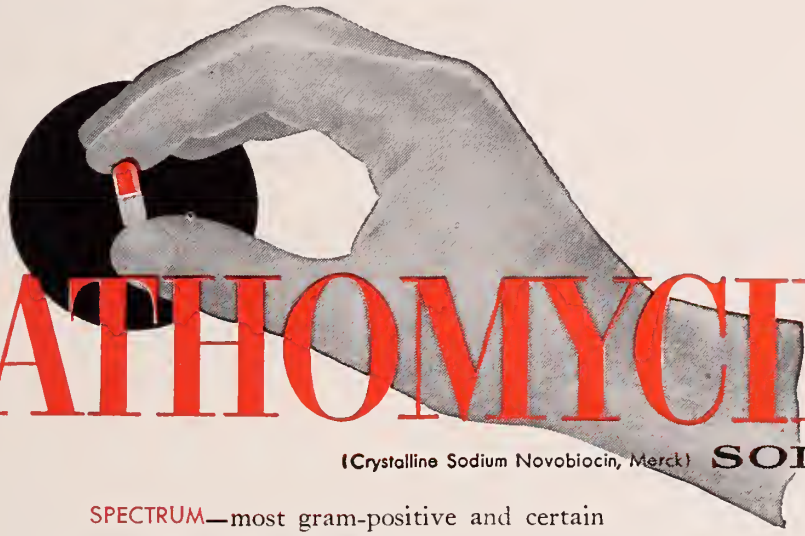
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The next Amendments were in connection with the Grievance Committee and had been presented in the Report of the Committee to Study the Operation of the Grievance Committee:

Amendment to Section VII
Grievance Committee

Sub-heading C—Disposal of Cases

After paragraph 1, add a new paragraph:

"When any case is referred by the State Grievance Committee to the local component Society for action, the Local component Society shall, within thirty (30) days, report its findings and disposition back to the Grievance Committee. If the Grievance Committe is not satisfied that the matter has been properly adjudicated, it shall then refer the case to the Council with recommendations."

Following the above added paragraph 2, shall be paragraph 3, of sub-heading C—Disposal of Cases, as follows:

"The failure of a Society member to respond to a request for appearance before the Grievance Committee shall be sufficient cause for a citation for contempt and shall be referred to the Council."

Doctor Shuller advised the Committee recommended the adoption of this portion of the report. Motion seconded and carried.

Doctor Shuller next read the following:

"Amendment to Chapter VII (The Council) Section 5 (Collective Duties of Council), Sub-section (B) third sentence—

"It shall hear and decide all questions of diseipline affecting the conduct of members of component societies and all matters referred to the Council on appeal from component societies or from the individual councilors." This is to be changed to read "component societies" near the end of the sentence insert a comma, strike the word "or" and continue "from the individual councilors or from the Grievance Committee."

Doctor Shuller recommended the adoption of this section of the Report. Motion seconded and carried.

This concluded the Amendments in connection with the Grievance Committee.

Doctor Shuller read the next proposed Amendment to the By-laws:

Paragraph (c), Section 1 of Chapter X of the By-Laws:

"Change the word between 'of' and 'years' to read one year instead of two years and that a sentence be added, immediately following that one, to read: 'The qualification of not having been in the practice of medicine in excess of one year shall become effective on January 1, 1957'."

The Committee recommended the adoption of the change. Motion seconded and carried.

The next proposed amendment was from Tulsa County. Doctor Shuller read it as follows:

Section 2, of Chapter X of the By-Laws shall be amended to read as follows:

Section 2. Amendments

"The House of Delegates shall have the authority to levy special assessments on the membership providing that a copy of the proposed special assessment, setting forth the amount and purpose for which levied, shall be sent to all members of the Association at least thirty calendar days prior to the meeting of the House of Delegates at whieh authorized. Such assesments shall be on an equal per eapita basis except for those active members who are not required to pay more than one-half of the regular years dues; this eategory of members shall be subject to pay one-half of all speeial assessments levied on active members. Special assessments shall be eolleeted in the same manner as dues; provided, however, that the House of Delegates shall provide for the time of paying such an assessment and established date of delinquency of same."

Doctor Shuller advised that the Committee recommended that this change "not be made" and so moved. Motion seconded and carried.

The next proposed amendment was from Garfield-Kingfisher County Soeiety, as follows:

"Chapter 1 Section 3, Sub-Section B of the By-Laws"

(1) Insert "life", thus making it read "honorary life members".

(2) Delete "and whose service to humanity and his profession has been so unusually outstanding as to merit honorary recognition may be plaeed on the honorary membership roll", and inserting "and whose service to humanity and his profession has been conducted with dignity and honor may be placed on the honorary life membership roll."

(3) Omit Sub-Section C. This section has to do with the creation of life members.

(4) Insert for Sub-Section C, the title "Certificates of Accomplishment. Sueh Certifieates of Accomplishment should be initiated by a component society of the Association, presented for consideration and reeommendation of the council and approved by the eouncil in a meeting prior to the annual session. Eligibility for such consideration is limited to those physicians who have been members of the Assoeiation for not less than the preceding five years. Recipients of the certificates are still allowed all the privileges of members; many hold office and are expected to participate in the program of the Oklahoma State Medical Assoeiation as dues paying members. This Certificate of Accomplishment to be limited to the recognition of real accomplishments in the field of medieine."

Doctor Shuller advised that the Committee recommended that this problem be tabled as of this meeting; that the new president of the Assoeiation be requested to appoint a Committee of three or more members to work out all dctails of this and submit it to the House of Delegates next year with p r o p e r recommendations for adoption. He so moved. Motion seconded and carried.

Doctor Shuller read the next proposed amendment to the By-Laws:

"Chapter X, Section 1 of the By-Laws—

Insert a new paragraph (b), re-designating the existing paragraphs, to read:

(b) Initiation Fee.

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1. Johnston, T. G., and Cazort, A. G.: J. Allergy 27:90, 1956. 2. Schwartz, E.: New York J. Med. 56:570, 1956. 3. Schiller, I. W., et al.: J. Allergy 27:96, 1956.

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The next item on the Agenda was the election of Officers.

The Speaker called for the election of President-Elect.

E. H. Shuller, M.D., moved: That Doctor John Burton be elected by acclamation. Motion seconded and carried.

The next office to be filled was Vice-President.

Doctor A. L. Johnston of El Reno, moved: "That Doctor Forrest Etter of Bartlesville be elected by acclamation." Motion seconded and carried.

Next was the election of the Speaker of the House of Delegates. Doctor Gallaher asked the Vice-Speaker, Doctor Haynie, to take the Chair. It was moved, seconded and carried that Clinton Gallaher, M.D., Shawnee, be elected Speaker of the House of Delegates for a two year term by acclamation.

Doctor Gallaher took the chair. He called for the election of the Vice-Speaker of the House. As there were two nominees for this office, it was necessary to elect by ballot. J. Hoyle Carlock, M.D., Ardmore, was elected Vice-Speaker of the House for a two year term.

The next office to be filled was Delegate to the A.M.A. to fill the unexpired term of James Stevenson, M.D., Tulsa, deceased. As there were two nominees, it was necessary to elect by ballot.

Wilkie Hoover, M.D., Tulsa, was elected.

Next was the office of Delegate to the A.M.A. for a two year term. As there were also two nominees for this office a vote was taken by ballot. Wilkie Hoover, M.D., Tulsa, was elected.

The next election was for Councilors and Vice-Councilors from the Districts to re-elect.

District No. 2, Powell E. Fry, M.D., Stillwater, was elected as Vice-Councilor to fill the unexpired term of Glenn McDonald, M.D., Pawhuska.

For District No. 4, Joe Duer, M.D., Woodward, was elected Councilor and C. A. Traverse, Alva, was elected Vice-Councilor, to succeed themselves.

District No. 7, C. C. Young, M.D., Shawnee, was elected Councilor. E. K. Norfleet, M.D., Sapulpa, nominated Paul Gallaher, M.D., Shawnee as Vice-Councilor to replace the first nominee which was out of order. Doctor Paul Gallaher was elected unanimously.

District No. 10, nominated Doctor Paul Kernek, Holdenville, as Councilor and Doctor Claude E. Lively of McAlester as Vice-Councilor, to succeed temselves for a two year term. They were elected unanimously.

District No. 13, John B. Miles, M.D., Anadarko, was elected Councilor and Charles E. Green, M.D., Lawton, was elected Vice-Councilor, to succeed themselves for a two year term.

This concluded the election of officers.

The Speaker asked the new officers to come to the front and be introduced.

Following this the meeting was adjourned.
Reported by Mary O'Leary.

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Book Reviews

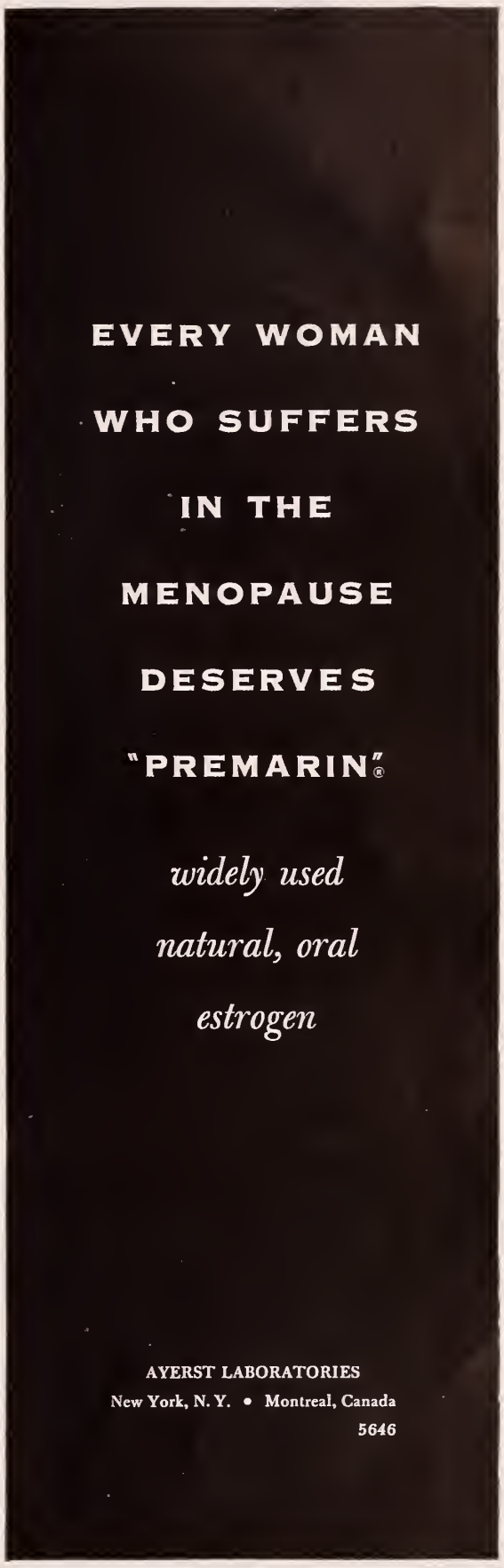
"THE TRUTH ABOUT CANCER" — by Charles S. Cameron, M.D.. (Publisher—Prentice Hall, Inc., Englewood Cliffs, New Jersey. $4.95.)

Rarely has a book been written for laymen on a scientific subject which is as worthwhile reading as "The Truth About Cancer" by Charles S. Cameron, M.D. Cancer calls for a greater degree of personal concern than any other disease. This meaty volume describes the nature, signs and symptoms of all varieties of cancer. It is concise in its coverage, coherent to the laymen as well as the doctor, descriptive in an amazing manner and complete in its content. Quackery in the diagnosis and treatment of malignant diseases is sanely discussed and the chapter on this teaches how to recognize and avoid the quack. Thorough discussion of the smoking problem and its relation to cancer is especially worthwhile.

Charles Cameron, the author, is Scientific Director of the American Cancer Society. Before sacrificing a promising surgical career for this position he was a Memorial Hospital trained surgeon of no mean ability. Following his stint in the U. S. Navy as Chief of the Tumor Service at the Brooklyn Naval Hospital, he was persuaded to take his present position of Scientific Director of the American Cancer Society. He is a scholarly scientist, a superlative speaker and a giant in the American Cancer Society organization. All royalties earned by this book go to the American Cancer Society for its fight to defeat cancer through research, education and service to the individual.

"The Truth About Cancer" is an excellent reception room addition, informative but not frightening; accurate, complete and satisfying, yet not complicated reading.

By one national reviewer it is called "The Book Of The Year". It is to be a "Book of The Month" credit selection although not "THE Book Of The Month". The Doubleday Book Clubs, which consist of fifteen book clubs, including the Literary Guild, will use "The Truth About Cancer" in a special "Health Book Mailing."—*Gregory E. Stanbro, M.D.*



BELLEVUE IS MY HOME. Salvatore R. Cutolo, M.D., with Arthur and Barbara Gelb. 317 pages. Doubleday & Company, Inc., Garden City, New York, 1956.

Doctor Cutolo, Deputy Medical Superintendent of New York's Bellevue Hospital, tells the story of one of the world's greatest hospitals which at one time was one of the most notorious. He has lived with it for 25 years and traces its story from its beginning, 40 odd years before the American Revolution, to the gigantic institution it has grown to be. He tells of the song writer, Stephen Foster, being picked up as a bowery derelict; of the resourceful Nellie Bly who gained admittance as a patient in the "insane wards" and of her daring in exposing the shameful conditions she found there. He tells also of the miraculous recovery of a young woman elevator operator who plunged 80 floors trapped in her car in the Empire State Building crash in 1945; and of the emergency facilities at the time of the burning of the Normandie. Bellevue is staffed exclusively by members of the faculties of New York University School of Medicine, New York University Postgraduate Medical School, Columbia University College of Physicians and Surgeons, and Cornell University Medical College. These visiting doctors volunteer their services in return for which they receive the privilege of doing research and, since every conceivable disease arrives at sometime at Bellevue, the opportunity for study is great. Several chapters are devoted to the place of religion in the care of patients, in fact, the administrative machinery is set up to facilitate religious ministration. Doctor Cutolo believes that a doctor who practices religion practices better medicine. The author tells this story with humor and with an easy style which makes the book an easy and inspiring one to read.—Irma A. Beehler, Librarian, Tulsa County Medical Society.

PHYSICIAN PLACEMENT

The following physicians have expressed a desire to locate in Oklahoma. To the best of our knowledge, the names, addresses, qualifications and availability are current and accurate.

Additional information concerning most of these physicians is available in this office. Anyone interested in contacting these physicians may do so directly or may use the state office as an intermediary.

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

Internal Medicine

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Pathology

Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, George Washington University, 1950, will finish four years pathology residency in January, 1957.

Pediatrics

David Goldstein, 66 Lafayette Ave., Staten Island 1, N. Y., age 38, Long Island College of Medicine, 1949, two year residency in pediatrics, Board certified, available after Oct. 1, 1956.

Surgery

Edward Wendell Foster, 147 W. Main, Meriden, Conn., age 62, Harvard University School of Medicine, 1924, certified by specialty board, veteran, available now, would consider surgery, obs.-gyn., or general practice.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available Jan. 1, 1957.

Boyd M. Saviers, 514 Lacewood Dr., Dallas, Texas, age 33, University of Oklahoma, 1947, finishing third year residency at Methodist Hospital of Dallas, veteran, available September, 1956.

Richard A. Walsh, 250 Fourth St., Elyria, Ohio, age 31, New York University, 1948, completed Part I, American Board of Surgery.

Urology

Harry Emanuel Fisher, Jr., Box 161, Barnes Hospital, St. Louis 5, Missouri, age 33, University of Oklahoma, 1952, veteran, available July 1, 1956.

Henry Ernest Wolfe, Jr., 879 Rosewood Ave., Vallejo, Calif., age 34, Albany Medical College, 1947, board qualified in urology, available upon separation from active duty, Aug. 15, 1956.

Locum Tenens

B. N. Shockley, 2009 N. Pearson Dr., Midwest City 10, Oklahoma, age 27, Marquette University, 1952, will be available for seven months beginning November, 1956, or can work for a 30 day period any time prior to November.

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*Moyer, J. H., and others:
J. Chronic Dis. 2:670, 1955.

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Editorials

Gift From the Dead

Recently the following editorial appeared in the Tulsa Tribune:

"The word 'autopsy' has certain unpleasant overtones to many people. But it shouldn't have. An autopsy or post-mortem examination can be—and repeatedly has been—the dead's finest gift to the living.

"The deceased person, through careful examination at the hands of doctors and pathologists, is saying to those he left behind, 'Here is knowledge of why I died. Use that knowledge to help keep yourselves and others from dying from the same cause.'

"Fortunately for all of us as well as for medical science, what once was shocked resistance to post-mortem examination now is being overcome by tact and education. Surviving relatives, who must give permission for it, are learning that there is no careless cutting on the loved one's body, no callous experimenting, no irreverent handling by untrained hands.

"Neither is it dissection, in the broad sense of the word. In most cases there is little or no evidence that a bit of tissue had been removed or an organ hidden during life had been examined to see why it failed.

"The list of troubles once deadly but now curable or treatable because of autopsy findings is long. Appendicitis was an agonizingly fatal "generalized inflammation of the bowel" until post-mortems discovered its cause and cure. Congenital heart defects, unknown only a generation or two ago, now are giving way to surgical miracles because autopsies pointed the way. One million diabetics are thankful because a doctor did a post-mortem in 1900 and found in death a hope for life.

"It is perhaps natural that a bereaved family should prefer to withdrawal in their grief when the family doctor, the surgeon or the pathologist asks permission to perform an autopsy. But the dead should not be denied their last opportunity to help the living."

This piece of prose sounds as if it came from the pen of Sir William Osler himself. One large Oklahoma hospital was so impressed by the article that copies were sent to every member of its staff. The common sense and shining beauty of this editorial are so great that the *Journal* reprints it here for the benefit of all our readers.

Doctors and Politics

A disturbing article bearing this title by Doctor David Rutstein, head if the department of preventive medicine at Harvard, appeared in the current (August) issue of the *Atlantic*. Doctor Rutstein denies the right of a physician to a political interpretation of medical information but is nevertheless quite sure that Mr. Eisenhower because of his two chronic diseases is not a suitable candidate for the presidency.

In three separate studies the five-year survival of patients who do not die with their first coronary occlusion is 50 per cent. The first of these studies was reported by Doctors Edward F. Bland and Paul D. White of Boston in 1941. Doctor Rutstein infers that Doctor White was something less than honest when he stated, considering President Eisenhower in his recovery: "The majority of patients that I see with this condition do well." In Doctor White's mind the word *condition* must have meant not just any coronary occlusion but an occlusion qualified by the location, the extent of muscle injury, the degree of shock, the evidence of conduction disturbance and other limiting factors that applied to the President's case.

The author takes exception to the announcement of his physicians of February 1, 1956 when he had practically recovered from his coronary thrombosis: "The President should be able to carry on an active life satisfactorily for another five to ten years." He thinks that this gave the President no choice

on medical grounds of refusing to run for re-election. These men are cardiologists or were guided by cardiologists who are quite as aware of the published statistical data on coronary disease as is Doctor Rutstein. Their conclusions referred to the President not to coronary thrombosis. No one knows how long an individual will live nor when he will die. The 50 per cent figure is not intended to tell this, but future figures will tell whether or not we are improving our ability to treat and to care for these people. The phrase *for another five to ten years* does have political implications and should have been omitted, for if his physicians could see no reason for earlier limitation they could not possibly see a reason for a later one.

After reading this article several times the following conclusions seem justified.

1. A lay publication may be a safer forum for such a discussion, but it is not the best.
2. Highly respected periodicals such as the *Atlantic* would do well to seek competent medical advice before accepting papers of a medical nature.
3. The physician's responsibility is to his patient and to the patient's family, even though he be President. He must give to the patient and his family the best advice that he possibly can, not only in regards to his illness but also the effect of his illness on his future activity and vice-versa.
4. A case may be a statistic but a patient is not.

Announcing . . .

the completion of the New State Headquarters Building

The Executive Offices of the Oklahoma Stote Medicol Association were moved to the new building on September 1. The building is located ot 601 Northwest Expressway, Oklohoma City. An open house for physicion members is tentotively planned for the middle of October. Upon the completion of finol arrangements, physicions will be notified of the specific dote in the October issue of the JOURNAL ond by personal invitation os well.

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Scientific Articles

POISONOUS PLANTS

H. A. SHOEMAKER, Ph.D.

THE AUTHOR

H. A. Shoemaker, Ph.D., is Professor of Pharmacology at the University of Oklahoma School of Medicine, Oklahoma City. His article on Poisonous Plants is the second of a series to appear in connection with the setting up of the Poison Information Center at the University School of Medicine.

There are approximately 525 species of plants in the United States that are known to poison domestic livestock or man. Only a compartive few are ordinarily likely to be ingested by man. Most cases of poisoning from plants or fruits occur when they are mistaken for some edible species; or when children, particularly the very young, have access to the plant or fruit and eat it. The information regarding plants that are toxic to animals is much more complete than for those which are poisonous for humans.

There is some misconception regarding the plants which are toxic for the human. A statement which is frequently heard is: "Birds and animals eat the seed or fruit and therefore it is safe to eat it." The fact that birds or animals may eat the seeds or fruit is no criterion for judging the safety for man. There is a difference in species susceptibility. For example a rabbit can eat the leaves of some members of the nightshade family almost with impunity, but all parts of the plant are poisonous for man.

The following list of poisonous plants is not complete. Only those cultivated and wild plants which grow in Oklahoma and which are most likely to be involved in poisoning are included. It is possible that some have been omitted that should have been included or some that are in the list could have been omitted.

The treatment when some part of a plant or some fruit or seed has been eaten follows the same general lines that is used following the ingestion of any toxic substance: The removal from the gastro-intestinal tract as rapidly as possible by emesis or gastric lavage, and catharsis; a delay in absorption by the use of adsorbants such as activated charcoal or the universal antidote (one part tannic acid, one part magnesium oxide, two parts activated charcoal); the precipitation of the toxic substance, such as alkaloids, by tannic acid alone or in combination with the ingredients of the universal antidote; or the destruction by oxidation by using a 1:10,000 solution of potassium permanganate for the first washing. Whenever adsorbants of precipitants are used they are removed by lavage, although in the case of the universal antidote a small amount of the mixture (2 tablespoonsful per quart of water) may be left in the stomach. If catharsis is indicated, sodium sulfate 2 - 3 gms. in water is a safe and effective agent for a 2 - 4 year old child. The adult dose is 15 - 30 gm.

The treatment subsequent to emptying the gastro-intestinal tract is usually expectant and symptomatic. There are only a few instances in poisoning by plants, fruits, and seeds for which there are more or less specific antidotes.

The following outline is modified from Martin:

I. *Irritants*

The largest group of toxic plants are those which produce irritation. The skin irritants are not included because the rashes are usually of a minor nature except with poison ivy, poison sumac, or poison oak. The treatment of these is very adequately covered in textbooks of dermatology.

1. *Irritants of mucous membrane of mouth and throat.* These substances produce almost immediate reaction when crushed in the mouth and consequently are usually not swallowed. The pricking and

burning sensation is followed by redness and swelling. This swelling may be severe enough to interfere with speech. If swallowed, these plants can produce a very severe gastroenteritis with shock.

Caladium	Diffenbachia
Calla Lily	Elephant Ear
Ceriman	

The mouth should be thoroughly washed with water to remove any remaining particles. Other treatment is symptomatic.

2. *Irritants of Gastric Mucosa.* These plants are not as severe in their irritant effects consequently they may not produce any noticeable effects in the mouth and throat. The irritation of the gastric mucosa usually produces prompt emesis. As a result there seldom is any irritation of the intestines.

Daffodil	Lycoris
Grape hyacinth	Narcissus
Jonquil	Rain Lily

The treatment in addition to the removal of the substance is symptomatic. There is no specific antidote.

3. *Irritants of Gastrointestinal Tract.* This group of plants does not produce an immediate irritation of the oral or gastric mucosa and consequently they may be swallowed and are not removed by their emetic action. They, therefore, may produce a generalized gastroenteritis of different degrees of severity.

Black locust**	Jequirity**
Castor bean**	Mimosa*
Clematis	Mock orange*
Colchicum	Peony
Columbine	Phytolacca*
Cyclamen*	("Poke")
Four O'clock	Poinsettia
Iris	Privet
	Rain tree*

Those plants which owe their activity to the presence of saponins* may produce a depression of the central nervous system and occasionally stimulation resulting in convulsions. In the case of Phytolacca the symptoms develop fairly rapidly and the syndrone is characterized by a very severe gastroenteritis accompanied by a respiratory and vasomator depression. The treatment is symptomatic: an opiate analgesic to relieve pain and the correction of electrolyte and fluid imbalance.

The most deadly plants which produce vomiting and diarrhea are those that contain toxalbumius**. Of these the castor bean is the most frequent cause of poisoning in children. The toxicity is due to the ricin which is present and 5 - 6 beans may be fatal to a child. The symptoms are a very severe gastroenteritis and its concomitant effects. There may be convulsions. There is usually some delay in development of symptoms. The treatment again is supportive and symptomatic.

II. *Plants which have an Atropine-like effect.*

Belladonna
Bittersweet
Black Night-shade
Jimson Weed (Datura stramonium)
Henbane
Moonflower (Dature meteloides)

The symptoms of poisoning by these plants is characterized by a dryness of the mouth, difficulty in swallowing, dilation of pupils with loss of accomodation for near vision, and tachycardia. Flushing of the skin is marked, especially about the face and neck. The skin is dry and hot. Cerebral stimulation results in restlessness, mental confusion, and sometimes delirium and convulsions. The symptoms of stimulation may be followed by depression.

The treatment consists of control of the excitement stage by means of sponge baths and mild depressants, such as bromides. The shorter acting barbiturates should be used with caution since large doses of atropine may have a synergistic depressant effect. In severe convulsions gaseous anesthetics may be used. Give adequate fluids and if the patient has difficulty in voiding, it may be necessary to resort to catheterization. Excretion of the alkaloids in the urine. Recovery usually is complete in two to four days.

III. *Plants which have a cardiac effect.*

Camelia	Aconite
Digitalis	Larkspur
Lily of the Valley	
Oleander	

The instances of poisoning by these plants is not common. Those in the first column have a digitalis-like effect. The symptoms develop fairly rapidly and consist of nausea and vomiting, and a slow pulse which later may become rapid and irregular. There may

be abdominal pain and purging. The treatment consists of gastric lavage with tannic acid, atropine and catharsis with sodium sulfate.

Do not give epinerphrine or other drugs which have a stimulating effect on cardiac muscle.

The plants in the second column have a tendency to produce bradycardia which is then followed by an arrythmia. There is an immediate burning sensation in the mouth, salivation, nausea and vomiting. Later the mouth is dry and the patient suffers from thirst. There may be diarrhea. With aconite there may be tingling and paresthesias, usually starting at the fingers and spreading over the entire body. Death may occur from circulatory and respiratory failure.

The treatment, following emptying of gastrointestinal tract, is symptomatic. The administration of oxygen and artificial respiration may become necessary. Atropine and digitalis have been recommended in the treatment of aconite poisoning but there has not been any sound pharmacological basis established for their use.

There are a large number of plants which may under some circumstances produce poisoning, but the danger is usually fairly remote. In any case where a part of a plant, a bulb, root, fruit, or seed has been eaten and its probable toxicity is not known, it is advisable to empty the gastrointestinal tract by emesis, lavage, or both and then observe carefully for at least 24 hours. Any symptoms should be treated as they develop as there are very few specific antidotes. Some plants or parts of plants may be used as food in certain seasons of the year. For example, phytolacca (poke) may be used after boiling in water and discarding the water which tends to remove the toxic substance.

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Giant Cell

TUMOR *of* TENDON SHEATH

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THE AUTHOR

Dr. Frank L. Flack is a practicing physician in Tulsa, Okla. He is a graduate of University of Kansas School of Medicine. He is a Fellow of the American College of Surgeons, and a member of the American Board of Surgery. At the present time he is president of the Tulsa County Medical Society.

Mrs. M. R., age 48, was admitted to the hospital September 19, 1955, because of a swollen, painful, infected, bleeding, stinking, sloughing left hand.

The patient had had some pain and swelling of her hand for 10 years but had continued her employment as a maid in a hotel until shortly before admission to the hospital when she caught her hand in a clothes wringer. This forced her to seek help because of greatly increased pain.

The past history was non-contributory except for the disability of her hand. She had had no shortness of breath and no symptoms of fatigue or exhaustion.

She was a well developed white woman, height 62 inches, weight 135, blood pressure 140/70, temperature, pulse and respiration essentially normal. Her physical examination was essentially negative except for the affected hand. There was a tumor mass measuring 20 cm. x 15 cm. involving the entire left hand. The fingers seems to stick out of the mass. There were many ulcerations, some of them 3 x 4 cm. in diameter. The whole mass was hot, red, tender and foul smelling. Urinalysis showed 1+ albumin and many white cells. The W.B.C. was 10,400; RBC 1,500,000; Hb. 3 gms. An

x-ray film of the hand showed erosions of the cortices of the metacarpals and phalanges with dislocations of some of the joints. Examination of bone marrow showed normoblastic erythroid hyperplasia.

Two days after admission she was given 500 ml. of whole blood. A day later her hematocrit was only 16 and blood volume studies revealed the following:

	Normal	*Patient*
Total Blood Volume	4725 ml.	4209 ml.
Total Plasma Volume	2538 ml.	3577 ml.
Total Cell Volume	2256 ml.	632 ml.

She received 500 ml. of whole blood daily for the next five days and the ninth hospital day after receiving 7,000,000 units of penicillin over this period, the arm was amputated just above the elbow with equal anterior and posterior flaps. Because of the lymph nodes that had been previously palpable, the axilla was opened but no enlarged nodes were found. She was ambulant the next day and was discharged from the hospital on the 12th post-operative day with all of the incisions well healed.

Comment

The tumor on microscopic examination[1] proved to be a giant cell tumor of the tendon sheath. The base of the tumor was situated about the proximal end of the first metacarpal bone. There were fragments of bone scattered throughout the tumor. The flexor and extensor tendons were free. The tendon sheaths were attached to the tumor. In sections there were multiple nodules with





many foam cells. In other areas there were nodules composed of giant cells with the nuclei distributed throughout the cell. All through this nodular tumor were acute and chronic inflammatory cellular elements.

The Armed Forces Institute of Pathology says: "There is no reference of a tumor of this nature having produced metastases and for this reason a diagnosis of pleomorphic variant of giant cell tumor is often made. The British writers in particular regard these tumors as synoviomata and some would regard this tumor as a low grade synovial sarcoma or malignant giant cell tumor.

"In this case spindle and pleomorphic areas were intermingled with accumulations of foam cells. These foam cells seem to be of special significance, since they are rarely seen in malignant tumors thought to arise from periarticular structures, but are a characteristic feature of the benign lesions arising in the same structures. A giant cell tumor of a tendon sheath reaching such a size is a very rare finding."

It is amazing that a human being could from chronic blood loss and infection develop this degree of anemia without symptoms of distress though working every day and that in this day of a medically enlightened public, such a person would fail to seek help before she had developed a lesion which reminds one of the horrible conditions illustrated in such old texts as that of Gould and Pyle.

1. D L. Galindo, M.D.

VISUAL SCREENING *of the Pre-School Child*

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Vision is the process through which we are able to recognize objects of the world we live in. For those who have not been denied it, our thoughts are seldom directed to what a wonderful thing it is, as we accept it as part of our everyday life. But to those who have had some form of a misfortune, the recovery of vision can become quite a serious problem. This fact is often brought home in the practice of the ophthalmologist who sees many preventable tragedies.

In spite of the excellent progress medicine has made, there are still too many instances where useful vision is lost through negligence and misunderstanding. With this in mind, the Oklahoma County Committee of the National Society for the Prevention of Blindness has undertaken a program of screening every pre-school child. This was begun in Oklahoma County with hopes of later extending it to cover most of the state. As one can surmise, this is quite an energetic undertaking, but one that is worth every hour spent toward its accomplishment. Before describing the progress of this program, let's first review why this age child is so critical.

The macula of the eye, that part with which we do our detailed seeing, does not attain full cellular development until the sixteenth week after the birth of the child. Consequently, during the first two or three months of life, the child's eyes may wander aimlessly. Bewteen the second and fourth month of life, the eye begins to develop its fixation reflex, or at this age the baby begins to follow movements with its eyes. From this time until after six years, there is a progressive development of vision, or what the oculists call "visual acuity." On the average, it is felt that by the end of the first year the child sees 20/100; by the end of three years the child sees 20/30; and by six years the child sees 20/20. If, for any reason during this period of development, some process interferes with the use of the eye, than there also will be a corresponding failure in development of vision. This process has been given the highly technical name of amblyopia ex anopsia, which means failure of development of vision from disuse.

Along with the development of vision, there also is developed a fusion reflex, which may be described as the ability of the brain to take the two images presented to it and superimpose them so that only one image is seen. This process begins around the age of six months when the aimless wandering of the eyes begins to cease, and the child readily focuses on objects with both eyes simultaneously. By the age of one year, the reflex is fairly well deep-seated, and its development is completed by the age of six years.

From the above, one can readily realize that the major development of our vision is before we enter school. This age, before six, is not only the most important in the development of vision, but it is also the best age for correcting any deficiencies that may be interfering with the development of visual acuity and/or fusion reflex. The most common critical deficiencies encountered are squints, anisometropias, and refractive errors of high degrees.

In squints, or strabismus, the eyes tend to deviate either in or out. If the squint is constant, then there is essentially no chance of development of fusion. If one eye is selected in preference to the other for seeing, then the deviating eye does not develop vision and becomes an amblyopic eye. A high percentage of convergent squints are corrected by glasses alone. These cases require complete cycloplegic (Atropine) refraction before it can be determined whether glasses are the sole answer. The remaining squints should be operated on or before the age of six, with the better results being obtained from the earlier operations.

Anisometropia means that the two eyes

have different refractive errors, with the variation usually being greater than 1.50 diopters. Because of this anomaly, the child cannot focus both eyes at the same time on a given object, and it is prone to select the eye with the least error. Thus, the other eye tends to become amblyopic unless steps are taken to permit the child to learn to use both eyes together. Even in some of these instances, there is a deficiency in development of the fusion reflex.

Refractive errors of high degrees may also lead to amblyopia unless glasses are provided so that the child can see clearly. If the child has no chance of obtaining a relatively clear image, then the eye is apt not to develop visual acuity.

An adequate resume of the incidence of amblyopia ex anopsia in the adult is impractical, but the incidence is higher than one might estimate. In 1945, Downing found among 60,000 selectees for the United States Army, 855 cases of uniocular amblyopia without strabismus, 770 with convergent strabismus, and 295 with divergent strabismus; or a total of 1,920 cases. This means that one out of 35 in this group had uniocular amblyopia, of which the majority could have had normal vision if they had received proper care before the amblyopia became deep-seated after the age of six.

In the latter part of 1954, through the assistance of Mrs. Ruby Hopkins, field representative of the National Society for the Prevention of Blindness, an Oklahoma County Committee was organized with the main purpose being to develop a program for visual screening of the pre-school child. The Delta Gamma alumnae, who have as their national project the program of sight conservation and aid to the blind, actively entered into the program by providing volunteer personnel for doing the testing. This is the ninth city in the United States in which they are now active in such a program, with five more cities soon to be added.

In February 1955, a group of the Delta Gamma alumnae completed a training program for the testing of children. Testing ability was perfected by practicing with their own children and by testing children in a day nursery under the supervision of their instructor. They soon became proficient in working with, and understanding, children of the four to six year age range. It has been well proven that the most efficient test is the use of the Snellen E. Chart, and having the child align either his arms or hands with the position of the three lengths of the E. This group also was instructed in the use of a pen light and observing whether the reflexes are aligned in the center of the pupil. This is known as the Hirschberg Test for finding muscle imbalances. Excitement was profound when the first successful application of this test led to finding five other squints in the same family. Five of these six children were in the pre-school age group.

During the spring following the training period, screening was begun in nursery schools and day-care centers. This procedure had to be abandoned as too inefficient, since it was not furnishing enough children for the volunteer hours consumed.

In the fall of 1955, it was decided to use churches as locations for screening and depending on notices to have parents bring the children in. It may have been that the public was not sufficiently informed, though every effort was made to encourage parents to have their pre-school child tested; but again this approach was too inefficient. During this four month period, 121 children were screened.

In January, aid was sought from the Parents-Teachers Association and school officials in notifying parents that pre-school children could be tested at pre-arranged locations. The results were most gratifying with 524 children being tested in a four month period. During the school year, September 1955 through May 1956, there were 702 children screened with 25 children being referred for visual care.

Under the present plans, churches will be selected for monthly screenings which will consist of two periods a day for three consecutive days. In general, the churches are cooperative in sending notices to mothers of their pre-school children. Also, a notice is placed in the church paper. For each location, the presidents of the P.T.A. of five surrounding schools are contacted to have notices made in school bulletins and announcements made at the P.T.A. meetings. Other public notices are made through radio

and television, newspapers, and by placing posters in surrounding shopping centers. It is anticipated that at least 1000 pre-school children will be screened in the forthcoming year.

The Delta Gamma alumnae have on file and available for use, two films for visual education. "Johnny's New World" is the story of difficulties encountered by a child with defective vision. Too often children will accept poor vision as normal, as they have not known anything else. The second film is for better understanding of the disease, glaucoma, and its serious additions to the number of blind in the United States. Efforts are being made to have various P.T.A. groups show that first film to the parents at their monthly meetings. In this way, it is hoped that the parents will become more acutely aware of visual defects present in children and that these inadequacies can be helped.

Since the institution of the program in Oklahoma City, a second chapter in Tulsa has been organized. The Delta Gamma alumnae volunteers will begin their training program this month and the testing of preschool children will follow. As time permits, further chapters will be organized to give the state greater coverage.

Occupational Medicine's
RELATIONSHIP *and* CHALLENGE TO ALL

EDWARD C. HOLMBLAD, M.D., F.A.C.S.

THE AUTHOR

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The term "Occupational Medicine" is a recent adaptation including industrial medicine and surgery as well as environmental medicine. A recent definition agreed upon at the Conference on the Education of Physicians for Industry in Pittsburg, December, 1955 is—"Occupational medicine is that branch of medicine which deals with the relationship of man to his occupation, for the purpose of the prevention of disease and injury and the promotion of optimal health, productivity and social adjustment."

This field of medicine dates back to Ramazzini and even before that time. In our country it has had a gradual development from the late 1800s to the early 1900s. The treatment of injuries in railroad work and the physical examinations of engineers and train operating employees are examples of earlier industrial medicine. There are at present over 4,000 railroad surgeons in one association and many more who do some medical work for railroads. The advent of the Workmen's Compensation laws accelerated the development of Industrial Medicine from 1910 to the present date. This industrial medical work has become so universal that practically every physician comes in contact with this type of case quite frequently in his practice.

There is a relationship between industrial medicine and all the specialties that I like to compare to the relationship of pediatrics to all the other specialties. The pediatrician consults with the cardiologist, the surgeon, the radiologist, the urologist, the neurologist, etc. in the care of his patient from infancy to the early teen years. The industrial physician is concerned with the optimum health of the worker in industry from the time he starts to work until he turns him over to the specialist in geriatrics. It is necessary for him to consult with internists, surgeons, radiologists, urologists, neurologists, etc. to obtain the best diagnosis and medical care. It is important that these consulting specialists understand the relationship of the specific medical problem to the actual work done by the employee. Sometimes abdominal cramps and pain in the painters are diagnosed as "lead colic" and "lead poisoning." It is important to know whether the paint that is used actually contains lead. If there is no lead in the paint

used, it is impossible for the employee to have lead poisoning from that paint. It is most difficult to differentiate between the causative and the casual relationships of work environment.

A toxic product with which an employee works may cause certain symptoms and pathology. On the other hand, the fact that he works with this product may be only coincidental.

It is important that all physicians have this understanding of the industrial relationship and point of view in examining, diagnosing and treating the industrial patient.

One of the best illustrations of the growing importance of occupational medicine appears in the April 21, 1956 issue of the *Journal* of the American Medical Association in the form of an editorial on page 1411 entitled "Industry Needs Physicians." It is well worth your while to read this one column editorial. Thirty years ago such recognition would have been impossible. The formation of the Council on Industrial Health of the American Medical Association and the appointment of State and County Medical Society committees on industrial health further attests to its importance as a growing field in the practice of medicine.

Because of the widespread diversification of employment, every physician is vitally interested in occupational medicine. Take the small rural community for instance with many farmers and agricultural workers. Years ago there were few industrial accident hazards and practically no occupational diseases. Since the farm has become mechanized, there are great hazards of serious industrial injuries. Every physician must become aware of the importance of safety programs, safety information and safety consciousness to the farm worker. Just one mangled arm caught in a corn picker or shredder will convince the treating physician of the value of safety programs. Likewise with occupational diseases the use of insecticides has brought about occupational dermatitis and occupational poisonings, even death, that shows how important it is that every physician, including all general practitioners, have knowledge of the toxicity of insecticides.

The field of occupational medicine offers a remarkable challenge to the medical profession. Just think how important it is to keep people well and in optimum health. The pre-placement and periodic health examinations of workers are most helpful in revealing unknown pathology. At least 10 per cent of the patients with a hernia are not aware of its existence until some pre-placement or insurance examination reveals its presence. Sugar in the urine, abnormal blood pressures, changes in vivion and abnormalities found in routine chest x-ray surveys are but a few of the findings revealed in occupational health examinations.

I know of no field in medicine where it is absolutely necessary to make a correct diagnosis. You have to be so sure of your findings and diagnosis that it may be necessary to back it up by testimony in court. And while we are on this subject, may I plead with all of you not to shirk your responsibility to get honest and medically reasonable testimony before the courts of law as well as industrial commission hearings. If our best qualified physicians refuse to go into court to see that medical justice is done, then the field is wide open for the professional medical testifier and charlatan. Do not be afraid to appear in court because the judge or commissioner will see that you are not abused and that you will be allowed to state your honest medical opinion.

Let's look at some of the other phases of occupational medicine's challenge. The rehabilitation of the injured or sick worker should start at the onset of illness or the time of the accidental injury. It is important to assure an injured worker that he will be able to resume work, even his regular work when he recovers. I believe every patient is entitled to some evidence of improvement from day to day. Changes in diet from liquid to soft to regular nourishment are such evidences. Also how thrilling it is when making hospital rounds to tell a patient he can sit on the edge of the bed or sit up in a chair or have bathroom privileges. There is no reason why you should not indicate these steps of improvement and recovery. It is also wise to plant the thought that soon he will be able to return to work. I usually tell a patient a week or two before I expect to release him for work to go down to his plant or place of employment and talk to his boss about suitable work that he can do in the

next few weeks. Then when he is told to go back to work he is prepared for it. I do not like to use the phrase "light work" when releasing a patient because the boss and fellow workers think he is using his injury for special privileges. I much prefer the term "modified work for two or three weeks" as a less offending method of releasing an employee to go back to work.

Then also I think it is important to discuss the question of permanent disability with those patients where permanent disability is anticipated and some sort of settlement is in order. I usually tell such patients that I know there may be some permanent disability or disfigurement but I also know there will be continued improvement in the next six months to a year. I tell them I will call them back for a disability evaluation examination at some future date so that their claim will not be outlawed. Many workers or their attorneys are anxious to force settlement consideration while swelling, limitation of motion, muscle atrophy and red scarring exists. If it is reasonable to anticipate improvement in these conditions, it is too early to estimate the permanent disability. It is not proper to estimate the permanent disability for settlement at the same time that it is reasonable to expect the employee to return to work. It is good practice to see the patient occasionally, say at weekly or two-week intervals, to see how he is working back into his job and suggest increased activity if that is in order.

The industrial commissions require medical reports both in cases of accidental injury and occupational disease. To delay filling out such reports or to give inadequate reports may jeopardize the payment of compensation to which the worker is entitled.

In cases of non-occupational illness or injuries, it is important to have accurate medical certificates. I feel that where an employer contributes any or all of the premium for sickness benefits then it is proper to evaluate that illness or disability as often as is reasonable or proper. Hospitalized patients usually get competent medical reports and medical certificates. It is unfortunate that so many medical certificates of disability are inadequate or unreliable. Every physician has had some patient ask him to make out a medical certificate for three or four weeks of disability so he can collect sickness benefits. To fill out such a certificate without having the patient under your care for that period is dishonest and fraudulent. It is difficult to get accurate and reliable diagnoses. The best method of counteract this is to refuse to pay benefits for such diagnosis as nervous fatigue, general debility, anemia, run-down condition, needs six weeks' rest, etc. It has been almost amusing to notice the attitude of some employees when you tell them they can have six weeks off but without sickness benefit. In most cases they say they will come back to work if they do not get sickness benefit.

I have had some strange and disheartening experiences in approving Blue Cross, Blue Shield, Major Medical and other medical and surgical indemnity benefits in the Chicago area. Some of our physicians seem to think they are entitled to their regular fee in addition to the Blue Shield or indemnity payments. If they continue to exploit these professional fee payments, they will force some type of complete medical care or socialized medicine on all of us.

The practice of occupational medicine can be a very challenging and rewarding experience. It can be done as a single case or as an on call physician in a plant. Since we have so many small industries, much of this work will have to be done by the general practitioners, the internists, surgeons, and as supplementary work for the young specialists. To get the most out of this work and to render the best possible service, it is important that the physician spend some time in the plant or to at least make periodic visits to the plant so that he sees and understands the environment and working conditions.

Many medical directors in industry have started out as part time industrial physicians and have gradually become full time specialists in the field of occupational medicine. It is gratifying to know that such positions demand the best possible clinical and professional ability. They continue to be physicians primarily and as such get the enjoyment and job satisfaction of their chosen profession.

Special Article

The Role of the A.M.A. *in* MALPRACTICE PREVENTION

WILLIAM J. McAULIFFE, Jr.

THE AUTHOR

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A Summary of the Malpractice Situation Over the Nation

One of the more alarming developments in professional liability is that the size of verdicts rendered in such cases is on the increase. Let me tell you the facts of a recent California case which resulted in the highest verdict that we know of.

The plaintiff in this case, a 54-year old man, employed as a stock clerk, had suffered intermittent claudication in the calves of both legs for about a year. He had been attended by a specialist in internal medicine who treated him conservatively with drugs intended to improve circulation. When the patient did not respond, he was referred by the internist to the defendant doctor, a specialist in vascular surgery. The surgeon examined the patient and found complete absence of pulsations from the femorals down. The plaintiff had all the other symptoms of an obstruction in his aorta and the defendant surgeon recommended that he enter the defendant hospital for further studies to determine if an operation could be performed to improve his condition. The plaintiff claimed he understood he was entering the hospital merely for some routine x-rays.

Now up to this point the patient had no sensory or motor nerve disturbances.

X-rays were taken of the plaintiff's chest and abdomen. Then two days later, a translumbar aortogram was taken.

I shall relate the highlights of this procedure. The plaintiff was taken to the x-ray department. The defendant doctor was present only at the start of the procedure. He did not participate in it. The plaintiff was given an anesthetic by an anesthetist. A resident in surgery inserted a 16-gauge needle into the aorta in the normal way without any difficulty. Thirty cc. of sodium urikon were injected through the needle and a series of films were taken. Upon examination of these films, with the patient still under anesthesia, the resident in surgery, after consultation with the radiologist, decided that an additional run should be made in an attempt to visualize collateral circulation lower down in the body. An additional injection of 20 cc. of sodium urikon was made without changing the position of the needle. Then the patient was returned to the room, apparently in good condition. The next morning at about 5:00 a.m. it was found that the patient was completely paralyzed from the umbilicus down. He had a transverse myelitis which unquestionably was permanent. Complete paralysis of the lower extremities, bowels and bladder was present. He was a permanent paraplegic.

The plaintiff claimed that the defendant surgeon did not himself perform the procedure as he had expected and that he was not advised in advance of the procedure that there were any risks or dangers attendant to it. He further claimed that 50 cc. of sodium urikon was too much and exceeded the recommended dosage of the manufacturer. The manufacturer's brochure indicated that 15 cc. of sodium urikon was the safe limit. However, there was testimony in behalf of the defendant that other patients had tolerated without any harmful effect more than 15 cc. of this fluid. The plaintiff also

complained of two runs being taken.

What caused the paralysis was difficult to establish. The defendant doctor and another expert believed that there had been an occlusion of the blood supply to the spinal cord which resulted in cecrosis of the cord. A neurosurgeon believed that the complication was due to a toxic reaction to the drug.

The case was submitted to the jury on the theory of resipsa loquitur, which does not require proof of negilgence by the plaintiff as there is a presumption or inference of negligence under this doctrine which stems from the untoward result. Thus, under this legal doctrine, the effect is that it is virtually necessary for the defendant to explain a way to the untoward result, which as I have already indicated, was very difficult if not impossible. The jury reached a verdict in favor of the plaintiff against both defendants, namely the defendant vascular surgeon and hospital in the amount of $250,000, which was reduced to $215,000 by the trial court. This case is now on appeal by both defendants.

Another recent case of a high verdict involved an 18-year old wife of a navy man who was allegedly given an improper spinal anesthetic when admitted to a navy hospital for childbirth. The consequence was arachnoiditis and paralysis from the chest down. Suit was brought under the Federal Tort Claims Act and a Federal judge, sitting without a jury, awarded $190,000 to the wife and $20,000 special damages, making a total of $210,000. This is believed to be the largest single personal injury award yet made under the Federal Tort Claims Act, or by any Federal judge sitting without a jury.

Both of these cases were decided in 1955.

Next, switching from specific cases, I shall give you a picture of professional liability in the United States as we find it.

The American Medical Association has been conducting a study of professional liability insurance and claims prevention programs. In this connection the Law Department sent questionnaires to the District of Columbia and all of the State Medical Societies, designed to elicit extensive information on this subject.

We have summarized the information received in response to these questionnaires, and I would like to outline for you some of the facts that have been obtained. (1) The following are the causes and aggravating circumstances of personal liability claims most frequently listed thus far: (a) imperfect results after orthopedic surgery, (b) x-ray burns, (c) foreign body left in a patient after surgery, (d) failure to obtain consent prior to surgery, (e) inaccurate prescriptions of drugs or improper diagnosis, (f) criticism of one doctor by another, (g) excessive fees, and (h) poor physician-patient relationship. One state said that at least 90 per cent of the claims in their state had some justification. Another said that only 30 per cent had merit. (2) The effect of a professional liability suit on the reputation and practice of a physician is slight, if any. A few states indicated that the effect is greater in small towns. (3) About 45 companies, both foreign and domestic, provide some type of professional liability insurance coverage. (4) Professional liability insurance is available and not difficult to obtain. (5) The limits of professional liability insurance carried by physicians vary considerably. (6) Twenty-two states have claims-prevention or review programs on a state level and two states have such programs on a county level. Only twelve states indicated that they offer educational courses with their claims-prevention programs. (7) Twenty-two states have a claims-review program with a committee or staff supervising the program.

That briefly gives you a quick review of professional liability throughout the country as disclosed by the societies in response to our questionnaire.

A very interesting analysis has been made by Doctor J. F. Sadusk of the professional liability picture in the Alameda-Contra Costa Medical Association in California. I would like to give you some of the facts as disclosed in Doctor Sadusk's analysis. Incidentally, a report of this appears in the Alameda-Contra Costa Medical Association Bulletin of May, 1955, in an article entitled "An Analysis of the Professional Liability Program in Alameda-Contra Costa County—1946 through 1954."

Doctor Sadusk found that: (1) 67.6 per cent of the physician membership was between 35 years old and 54 years old and that this group accounted for 78.4 per cent of the professional liability incidents of the

society; (2) ninety-two physicians had one incident each, ten had two incidents each, three had three, and one had four: the fourteen physicians who had more than one incident each constituted only one per cent of the County Medical Association membership, but accounted for 27 per cent of the ad damnum (amount of money asked for in suit for damages) filed; (3) 68 per cent of the claims were surgical in nature, 18.4 per cent were medical and the rest involved radiological, equipment and other problems; (4) in the surgical incidences, obstetrics and gynecology, orthopedics and general surgery accounted for 53.9 per cent of the total of such incidents; (5) 70 per cent of the professional liability incidents occurred in a hospital; and (6) the number of malpractice incidents per 100,000 admissions ranged from zero in the case of one hospital to 56.4 incidents per 100,000 admissions in another hospital, with the medium being 12 per 100,000 admissions.

Another California doctor, Andrew Sandor, M.D. of Alhambra, has tabulated all of the reported cases in the United States. A reported case is a case which appears in the law reports and thus has reached at least an appellate court: the cases which are not appealed from the trial court are not reported in the law reports. I believe that Doctor Sandor's tabulation makes for a very interesting analysis of the professional liability situation throughout the country.

The first reported case in the United States is *Cross v. Guthrie* which was decided in 1794 in Connecticut. The first reported case in Oklahoma is *Champion v. Keith*, which was decided in 1906. Of possible historical interest is that Abraham Lincoln represented the physician in the first reported case in Illinois, *Ritchey v. West*, which was decided in 1860. I regret to say that Mr. Lincoln and Doctor West lost. This tabulation of Doctor Sandor includes reported cases up to 1950. On the basis of the total number of reported cases up until 1950, California ranks first with 144, New York second with 116 and Oklahoma 19 with 31.

Summary of the Role of the A.M.A. in Professional Liability Education Programs

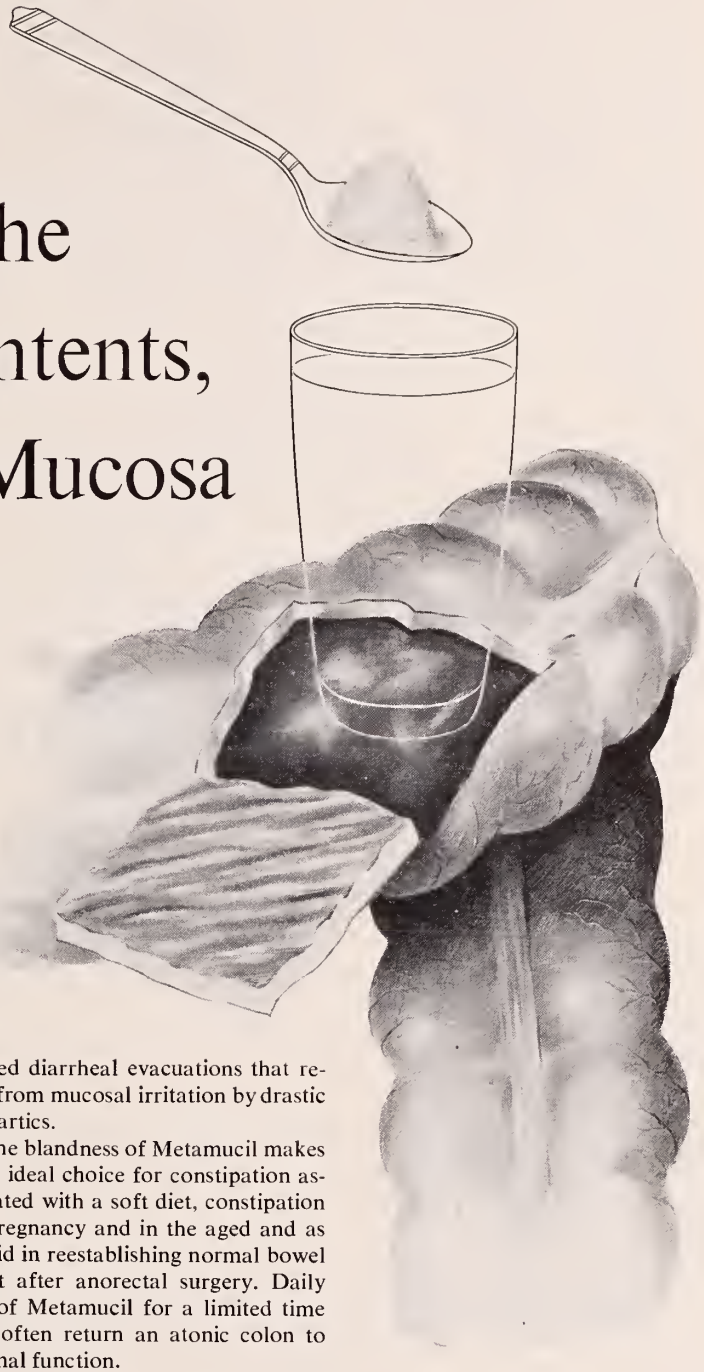
The American Medical Association through its Law Department, is very much interested in professional liability education programs. This study of professional liability insurance programs and claims-prevention programs which I have already referred to, is perhaps one of the most important projects undertaken by this Department since its creation in August, 1954. It was initiated as a result of a number of resolutions presented to the House of Delegates by State Medical Societies requesting advice and assistance in this field. Before the study is completed, we intend to make a survey of the professional liability experiences in other countries, a survey of practicing physicians, a survey of attorneys who participate in professional liability claims, a survey of insurance companies who offer professional liability insurance, a survey of judges who sit in judgment of physicians in professional liability cases, an analysis of state legislation and reported cases and a survey of comparable fields of negligence actions. Also, we propose to prepare and publish special articles on professional liability in the Journal of the American Medical Association on such subjects as the following: The Law of Professional Liability; the Res Ipsa Loquitur case; the Rule of Respondeat Superior; the History of Professional Liability Claims in the United States; the History of Professional Liability Claims in Other Countries; Professional Liability Claims Prevention; Put It in Writing Doctor; Hazardous Therapy; and Timely Use of Consultants.

In addition to this study this year we conducted three medicolegal symposiums, one in Chicago, one in Omaha and one in New York City in which we attempted to promote better understanding between the legal and medical professions. One of the subjects discussed at all of these meetings was professional liability. Next month we are having a meeting of all the attorneys of organized medicine, both state and national, at which professional liability will be discussed. In addition, another activity which we have undertaken in an effort to foster professional liability education programs has been to provide a member of the Law Department for meetings of county and state medical societies to discuss this topic just as I am discussing it this evening.

(Continued on Page 352)

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Association Activities

PRESIDENT'S LETTER



Once more our government is asking—subtly demanding—the Medical Profession to assume another important and arduous task.

Public Law 569 could be construed, as saying to the dependents of members of the Uniformed Services, that they are not capable of providing themselves with good medical care. Another possible deduction is that the government is telling the Medical Profession to carry out the mandates of this law or there will be federal intervention.

Is all this part of a trend? Will housing, food, clothing, etc., be next on the agenda? What other branches of the government, what other organizations, will ask for the same emoluments? We must be extremely careful not to be nailed to the same cross we now support.

Be that as it may, the members of the O.S.M.A. must: First set up the machinery necessary to provide the Medical care to those so designated. This will entail creating and adopting a Fee schedule, which must meet the approval of some red tape and eight copy Federal Agency. Second we must bring into being or designate an organization to administer the mechanics involved, i.e., determining whether this or that procedure was indicated,—adjudicating fees, collecting from Uncle Sam, paying the Doctors, and any other duties usually assigned an umpire. To be alive is fortunate, of course, when you are confronted with more triplicate forms, life may not be so gay.

But what are we going to do? We must approach the problem open-mindedly and in a spirit of inquiry, find the bases for postulates, and eventually the obvious solution will occur. In this, another immense confusion, we will accomplish our task in a workmanship like manner.

While you are esconsed in your favorite chair or pursuing your favorite pastime, the executive staff and several members of this association will be laboriously hacking away at this allocated problem. If you should think of frugality, all of this is worth more to each of YOU than one year's dues plus any assessment.

Tom McClure M.D.

President



"I'll take care of that later . . ."

He was a wonderful husband and father, a great doctor, a man who was extremely meticulous in everything he did—except in his planning for his family's future in the event of his death. In this respect he became the victim of procrastination—"I'll take care of that later."

What he could have accomplished so easily now becomes the biggest problem his wife will ever have to face—there is no semblance of order in the estate he left, in fact his widow has no assurance at this moment that she will even be able to provide an education for the children. The expenses of settlement of the doctor's estate will run as high as one-third of all he left! Indeed, the price of neglect in this case will run much higher than the doctor ever realized because—"I'll take care of that later."

Have you provided for the protection and security of your family, Doctor? If you have neglected the vitally important business of arranging for the transfer of your estate in the event of your death, don't delay another day! Our Trust Department will be happy to discuss this urgent matter with you immediately. Now—today—call REgent 6-1531 and ask for our Mr. Scott. He will be happy to call on you at your convenience.



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A.M.A. in Malpractice Prevention

(Continued From Page 348)

The AMA can, and does perform the services which I have just outlined, but it is not constituted to intercede or participate in civil actions between a physician and his patient. Furthermore, the AMA is not staffed to perform such a service. Another reason for the AMA's inability to assist in professional liability suit is that if the AMA did perform such a service, it would lose its present tax status. The AMA for the purposes of taxation in considered to be a business league. If it assisted doctors in professional liability suits, benefits of the Association would be then enuring to the individual members of the Society. Thus the AMA would be in a business and would be taxed as any other corporation or organization that is in business. Furthermore, if the AMA did provide this service, it would mean that one doctor would be paying for the expenses of another incurred in litigation.

Summary

The size of verdicts in increasing. There can be no question about it. The AMA is doing and will continue to do everything it can in professional liability education. The AMA is currently engaged in a survey that it hopes to conduct in an objective, judicious manner, with the view of formulating a comprehensive report on the subject of professional liability as it exists in the U.S., plus affirmative suggestions for reducing such claims. But it can not participate in the individual lawsuits of physicians.

Oklahomans Meet At Flight Nurse Graduation



The graduation of Flight Nurse Class 56-C at the Gunter Branch—School of Aviation Medicine recently brought together coincidentally a group of people who received at least a part of their professional training in Oklahoma.

Colonel Fratis L. Duff, Commander of the Gunter Branch—School of Aviation Medicine since October, 1953 was graduated from the University of Oklahoma School of Medicine. To the right of Colonel Duff is Mrs. Duff, a graduate of Wesley Hospital School of Nursing. Standing next to Mrs. Duff is Mrs. Richard W. Simpson, graduate of St. Anthony School of Nursing. Mrs. W. W. Brier on Colonel Duff's left, is a graduate of Oklahoma City General Hospital and Captain Cora Conerly, Flight Nurse at Patterson Air Force Base, received her professional education at the University of Oklahoma School of Nursing.

Mrs. Brier has the distinct honor of being the first Flight Nurse. She participated in the graduation ceremonies at Gunter by pinning the wings on the graduates.

Golden Anniversary, Southern Medical Association

Physicians who are members of their county and state medical societies are cordially invited to attend the Golden Anniversary Celebration of the Southern Medical Association, October 2-3, to be held at the Read House, Chattanooga, Tennessee.

The Golden Anniversary Celebration will begin with a dinner meeting at the Read House, Chattanooga, on Tuesday evening, October 2. A feature of that program will be an address by R. L. Sanders. M.D., Memphis, immediate past-President of the Southern Medical Association, on "Fifty Years of Medicine in the South." Doctor Sanders graduated in medicine at Nashville in 1906, his fifty years of practice running concurrently with the fifty years of the Southern Medical Association. Dwight H. Murray, M.D., Napa, California, President of the American Medical Association, will represent the AMA at the Celebration.

A feature of the Wednesday morning session will be the unveiling of a plaque to be placed in the Read House commemorating the birth of the Southern Medical Association there fifty years before on that date.

A group of physicians from Alabama, Florida, Georgia, Louisiana, Mississippi and Tennessee met at the Read House in Chattanooga on October 2-3, 1906, and organized the Southern Medical Association. The founding fathers in the Constitution and By-Laws they adopted at Chattanooga stated "the exclusive purpose of this Association shall be to develop and foster scientific medicine . . . It shall not at any time take active part in any economic, political or sectarian questions or concerted movements for securing legislative inactments." It was to be devoted exclusively to scientific medicine. That same Constitution and By-Laws made it necessary for a physician to be a member of his county and state medical societies and to be eligible to membership in the Southern Medical Association. All of the above has never been changed. Several years later the physicians who were members of the state and county medical societies in Arkansas, District of Columbia, Kentucky, Maryland, Missouri, North Carolina, Oklahoma, South Carolina, Texas, Virginia and West Virginia were made eligible to membership.

Patterson Brothers Receive 50-Year Pins

James L. Patterson, M.D. and Fred L. Patterson, M.D. of Duncan were honored recently by the Stephens County Medical Society, when W. S. Ivy, M.D., oldest member of the organization, presented them with 50-year pins.

The two brothers were reared in St. Joseph, Missouri, and attended the Ensworth Central Medical College there. Both of them graduated on the same night, fifty years ago.

There is 22 months difference in their ages, and when they graduated, Doctor Fred was only 20 years old and too young to practice, so he waited until 1908 to settle in Fargo, Oklahoma.

Doctor Jim's first practice was in Mutual, Oklahoma, 20 miles away. It was an all-day trip to visit each other.

In June, 1917, they both enlisted in the Army as captains in the Medical Corps. When they were discharged in 1919, they moved to Woodward and set up practice together. In 1922, three other doctors joined them to form the first clinic in the state of Oklahoma.

In 1925 the clinic was dissolved, and Doctor Jim moved to Elk City for a year, then to Duncan the next year. Doctor Fred remained in Woodward until 1934, when he moved to Carnegie and built a hospital there. He remained in Carnegie until coming to Duncan in 1945.



Standing, left to right: James L. Patterson, W. S. Ivy and Fred L. Patterson.

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Clinical Society To Hold 26th Annual Meeting

Members of the Oklahoma State Medical Association are cordially invited to attend the 26th Annual Conference of the Oklahoma Clinical Society, October 22-25, 1956 to be held at the Biltmore Hotel, Oklahoma City, Okla.

Distinguished guest speakers of the Fall Clinical Conference will include: Albert Behrend, M.D., Philadelphia, Pa.; William H. Beierwaltes, M.D., Ann Arbor, Mich.; Donald J. Birmingham, M.D., Cinicinnati, O.; Ethan Allan Brown, M.D. and John F. Crigler Jr., M.D., Boston, Mass.; Willis E. Brown, M.D., Little Rock, Ark.; Vincent P. Collins, M.D., Houston, Tex.; Kendall B. Corbin, M.D., Rochester, Minn.; A. Keller Doss, M.D., Fort Worth, Tex.; Edward T. Evans, M.D., Minneapolis, Minn.; Patrick J. Fitzgerald, M.D., Brooklyn, N.Y.; Rufus C. Goodwin, M.D., San Francisco, Calif.; Gordon McNeer, M.D., New York City, N.Y.; Gordon Meikeljohn, M.D., Denver, Colo.; Joseph H. Ogura, M.D., St. Louis, Mo.; Henry B. Turner, M.D., Memphis, Tenn., and Harold W. Elley, Ph.D., Wilmington, Del.

An outstanding program of postgraduate teaching will be delivered by the guest speakers who have been selected from various medical and teaching centers throughout the nation. In addition, a new feature will be specialty lectures, and there will also be daily luncheon round table question and answer sessions, and a clinical pathologic conference.

The entertainment will include dinner meetings, the annual Clinic Dinner dance and Specialty Group dinners.

For further information, address: Executive Secretary, Oklahoma County Medical Society, 503 Medical Arts Building, Oklahoma City, Oklahoma.

HAVE YOU HEARD?

Forrest Brown, M.D., former director of the Seminole county health department, was appointed assistant director of local health services for the state department of health at Oklahoma City.

A native of Oklahoma, he attended Cameron college at Lawton and the University of Oklahoma School of Medicine.

W. D. Stovall, M.D. has been appointed county doctor for the city of Sand Springs.

A. B. Carney, M.D. and John E. McDonald, M.D. have been named to the Credentials Committee of the United States Division of the International College of Surgeons.

The University of Oklahoma Medical Center has been presented with a Van de Graaff X-ray generator by the Donner Foundation of Philadelphia. The 2-million volt X-ray therapy unit will be delivered next year after special facilities have been built to house it.

John A. Schilling, M.D. has been appointed the first fulltime Head of the Department of Surgery at the University of Oklahoma School of Medicine. He was Assistant Professor of Surgery at the University of Rochester School of Medicine and Dentistry before coming to Oklahoma.

Louis J. West, M.D. has now assumed his duties as fulltime Head of the Department of Psychiatry following his release from active duty with the airforce.

O. H. Patterson, M.D. has recently opened offices in the Joseph Building, Sapulpa, Okla.

Robert V. Bolene, M.D., formerly of Enid, has opened a medical practice in the Community building at Ponca City, Okla.

I. F. Stephenson, M.D. has assumed duties as President-elect of the Alva Rotary Club.

Arvin C. Roberson, M.D., formerly from St. Anthony hospital, Oklahoma City during his residency, has joined the staff at the Anadarko Hospital and Clinic, Anadarko, Okla.

Roger G. Johnson, M.D. has opened his offices in the Medical-Surgical Clinic, Frederick, Okla.

Seventy-Six Attend Clinical Symposium

The McAlester Clinic and the McAlester Clinic Foundation under the joint sponsorship of the Department of Postgraduate Education, University of Oklahoma School of Medicine, presented their Second Annual Symposium, August 4-5, at the Aldridge Hotel in McAlester. Seventy-six Oklahoma physicians attended the lectures.

Outstanding speakers on the program included:

Malcom E. Phelps, M.D., El Reno; Fred D. Switzer, M.D., C. K. Holland, M.D., Thurman Shuller, M.D., H. C. Wheeler, M.D., S. L. Norman, M.D., L. S. Willour, M.D., George M. Brown, Jr., M.D., E. H. Shuller, M.D., Bruce H. Brown, M.D., McAlester; John J. Donnell, M.D., Allen E. Greer, M.D., Joe M. Parker, M.D., Peter E. Russo, M.D., Oklahoma City; M. P. Capehart, M.D. and Worth M. Gross, M.D., Tulsa.

Topics which were discussed on Saturday afternoon included presentations on pediatric aspects of trauma, chest injuries, eye injuries, head injuries, burns, diabetes in trauma, and fractures of the elbow in children. The closing session was a panel discussion on coronary heart disease.

A Dinner-Dance, attended by physicians, wives and guests, was held Saturday evening at the McAlester Country Club at which time Malcom E. Phelps, M.D., El Reno was guest speaker on the dinner program. Doctor Phelps, President-Elect of the American Academy of General Practice, pointed out the various responsibilities that a physician has to his patient, his community and his family.



Pictured left is L. S. Willour, M.D., McAlester presenting the 50-year pin to George R. Booth, Sr., M.D., Wilburton.

Highlight of the evening, was the presentation of a 50-year pin to George R. Booth, Sr., M.D., of Wilburton. The presentation was made by L. S. Willour, M.D., McAlester who paid homage to Doctor Booth and the half century of service which he has rendered to humanity.

Recreational activities for Sunday morning included fishing and a golf tournament. The golf tournament was held at the McAlester Country Club and was sponsored by the Pfizer laboratories. Alan S. Cameron, M.D., Muskogee, who tied for first place at the recent State Medical Association golf tournament, was the winner of this event.

Following the recreational activities, a session on Clinical Techinques was held at the McAlester Clinic. Topics discussed were: "Kirschner Wire Technique for Hip Pinning"; "Erythroblastosis and Exchange Transfusion"; "Gastroscopy and Its Application"; and "Routine Operative Cholangiography."

A Cinema Clinic was held and films were shown entitled, "Heart Disease", "Diagnosis of Acute Abdominal Problems", and "Bronchoscopy and Chest Anatomy Management".

The afternoon session was devoted to papers on Malignancy. Topics discussed were "Skin Lesions"; "Carcinoma of Lung"; "Malignant Change in Osteochondromas"; "Control of Pain—Neurosurgical Aspects"; "Malignancy of the Colon"; "Present Concept of X-ray and Radium Therapy." The closing session was devoted to a panel discussion on "Massive Upper Gastrointestinal Tract Hemorrhage."

Eight hours of Category I credit was allowed by the American Academy of General Practice.

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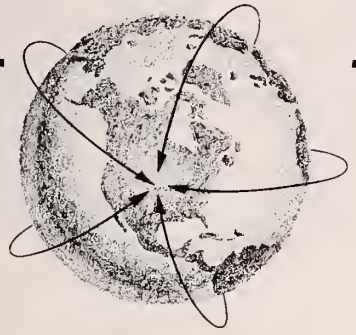
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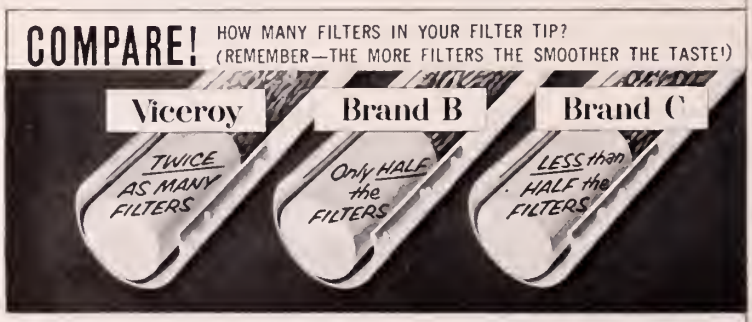
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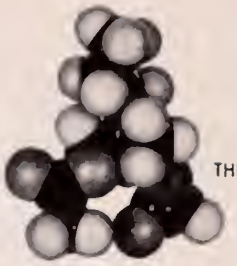
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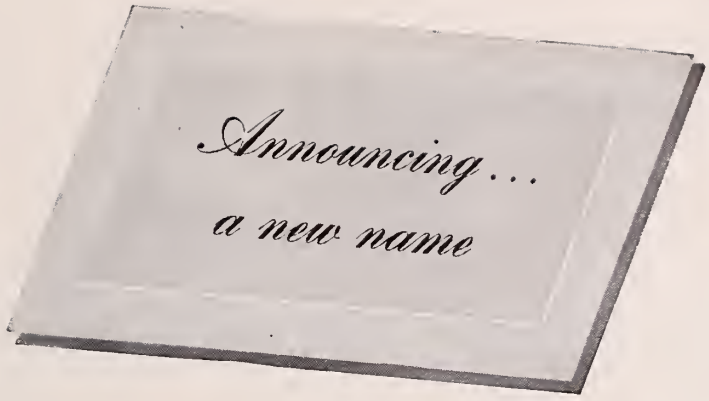
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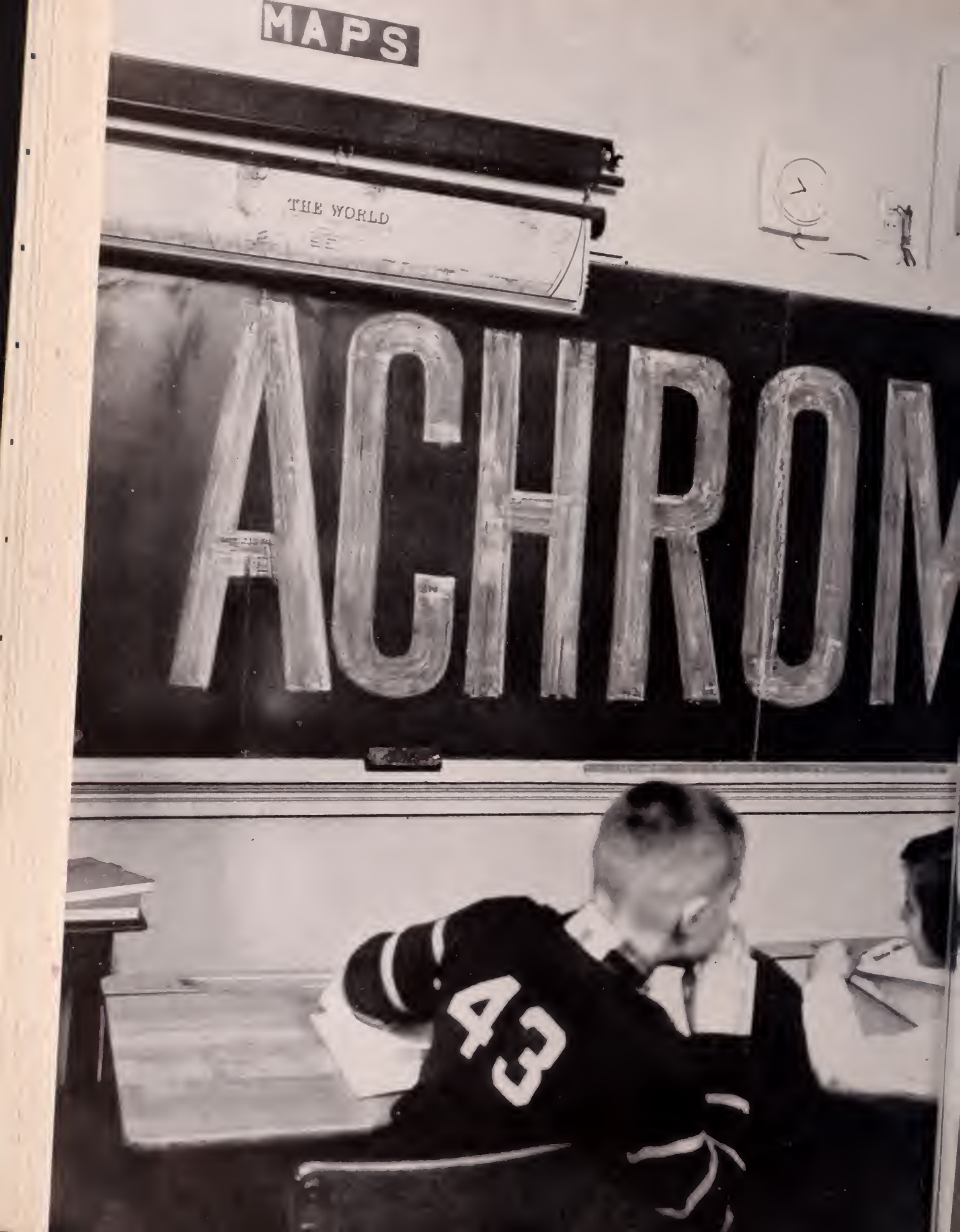
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[1]January, H. L. et al: Clinical experience with tetracycline. *Antibiotics Annual* 1954-55, p. 625.

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ANNOUNCEMENTS

Mississippi Valley Medical Society
21st Annual Convention, September 26, 27, 28, 1956, Hotel Morrison, Chicago, Illinois.

American Medical Writers Association
13th Annual meeting, September 28-29, Hotel Morrison, Chicago, Illinois.

Oklahoma Clinical Society
October 22, 23, 24, 25, 1956, Oklahoma City, Okla.

Southern Medical Association
Golden Anniversary Meeting, November 12, 13, 14, 15, 1956, Washington, D. C.

American Medical Association Clinical Meeting
November 27-30, 1956, Seattle, Washington.

Oklahoma Academy of General Practice
February 4, 5, 1957, Biltmore Hotel, Oklahoma City, Okla.

Oklahoma State Medical Association
Annual Meeting, May 5, 6, 7, 8, 1957, Tulsa, Okla.

International College of Surgeons
10th Biennial Congress combined with the 21st annual Congress of the United States and Canadian Sections. September 9, 10, 11, 12, 13, 1957, Chicago, Illinois.

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Book Reviews

THERAPY OF FUNGUS DISEASES: An International Symposium. Edited by Thomas H. Sternberg, M.D., Professor of Medicine (Dermatology) and Assistant Dean for Postgraduate Medical Education and Victor D. Newcomer, M.D., Associate Professor of Medicine (Dermatology), School of Medicine and Medical Extension, University Extension, University of California at Los Angeles. First Edition. Cloth. $7.50. Pp. 332. Little, Brown and Company. Boston-Toronto.

In the last decade, there has been more and more interest in the field of fungus diseases, stimulated particularly by the experiences and problems encountered in the Pacific areas during World War II. This book is a report, carefully edited, of an International Symposium on therapy of fungus diseases held June 23, 24 and 25, 1955, at the school of Medicine and Medical Extension, University of California at Los Angeles. A total of 208 scientists participated, representing 24 states and eight foreign countries. The material presented at the symposium has been well organized and presented by the editors, so that as a result each paper is easy to read and follow. There are few illustrations but none are expected, however, the tables and charts are excellent and well-presented so that the results of laboratory procedures are clear, as well as the results of the various therapeutic agents reported.

There is much information presented on the antifungal antibiotic mystatin revealing its use in various laboratory procedures, in culture media, animals and results obtained to date in clinical patients. Quite informative is not only the use of Mystatin in Superficial fungus diseases, but in the deep fungi. Other antifungal agents reported on include the aromatic diamidines, nitrostyrenes, filipin, actidione, undecylenic acid, chlorquinaldol and others. Not only are many thereapeutic aspects of the various antifungal agents discussed, but to those interested in mycology, the discussion of the biologic aspects of fungus infections is quite important and interesting.

Another interesting and stimulating feature is the information presented by the mycologists on the study of the superficial and deep fungi in their respective countries, namely, India, France, Argentina, Brazil, Mexico, the Philippines and the Ukraine.

This excellent edition will appeal particularly to those interested in dermatology and mycology, but many of the papers will be of value to those dealing with the more common fungi daily, as an aid to their control and eradication. Paul O. Shackelford, M.D.

CIBA FOUNDATION SYMPOSIUM ON HYPERTENSION HUMORAL AND NEUROGENIC FACTORS. Edited by: G. E. W. Wolstenholme and Margaret P. Cameron. Little, Brown & Company, Boston. 1954. 285 pages, 73 illustrations. $6.75.

This volume contains the complete papers and discussions of Humoral and Neurogenic Factors in Hypertension from the Symposium held in London, July 27-30, 1953.

Twenty-one papers were presented, some of which were of a general review type such as Irvine Page's on Neural and Humoral Control of Blood Vessels and Heyman's discussion of some new aspects of Reflex Blood Pressure Regulation and Hypertension. Other papers discuss the Kidney in Experimental Hypertension, Water and Electrolytes in Experimental Hypertension, and Chemical Screening Methods for the Diagnosis of Phaechromocytoma.

Some controversial ideas were presented —i.e., Jimenez Diaz' suggestion that noradrenaline is released from the arterial wall following stimulation of the arterial nerve supply, and Helmer's presentation of a sustained pressor material possibly related to renin.

The informal, often lively discussion after each paper adds considerably to their value and emphasizes the fragmentary stage of our present day knowledge.

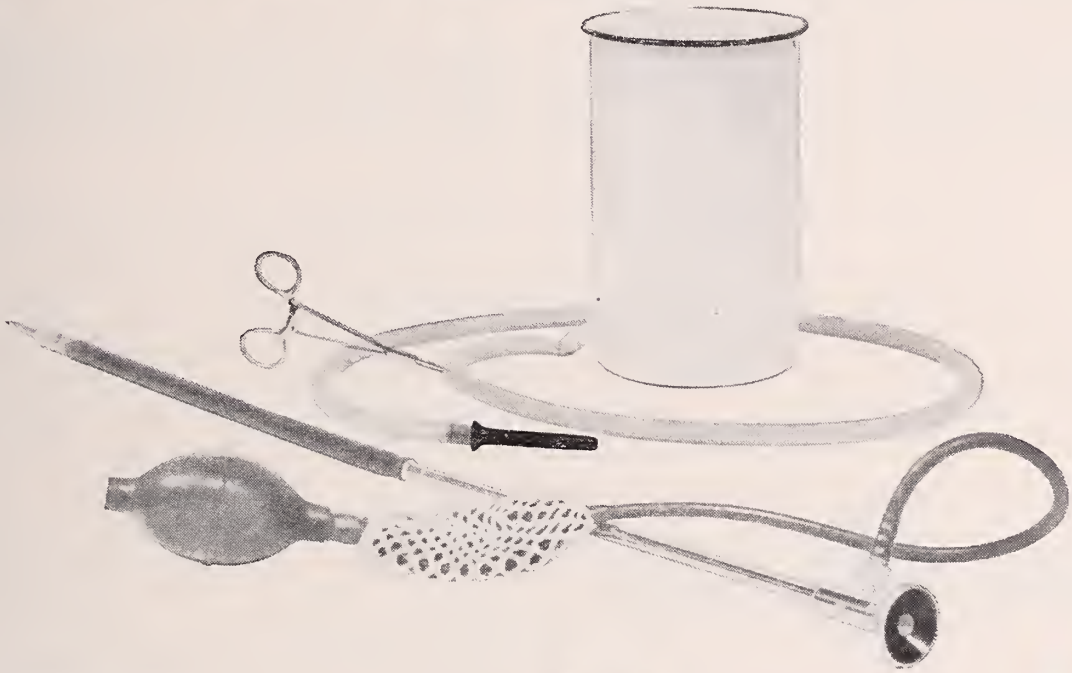
This volume is recommended for the internist, particularly if he is interested in diseases of the circulation.

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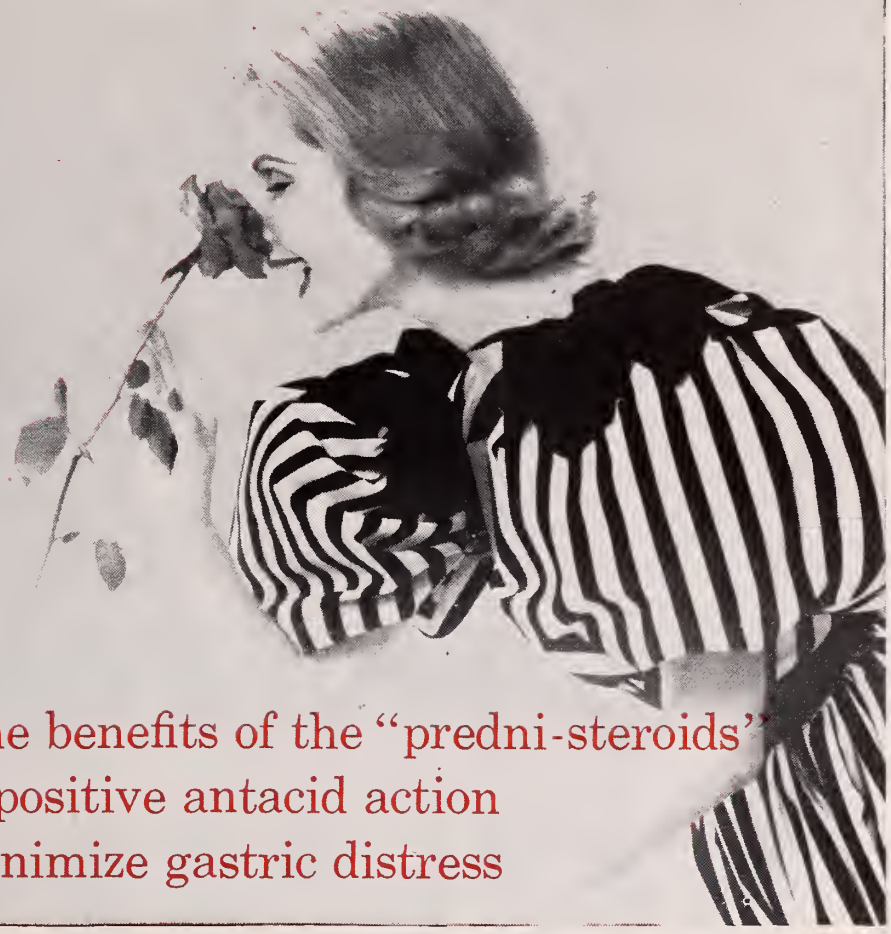
All the benefits of the "predni-steroids" plus positive antacid action to minimize gastric distress.

References: 1. Boland, E. W., *J.A.M.A.* 160:613 (February 25) 1956. 2. Margolis, H. M. *et al.*, *J.A.M.A.* 158:451 (June 11) 1955. 3. Bollet, A. J. *et al.*, *J.A.M.A.* 158:459 (June 11) 1955.

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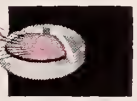
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References: 1. Boland, E. W., *J.A.M.A.* 160:613 (February 25) 1956. 2. Margolis, H. M. *et al.*, *J.A.M.A.* 158:454 (June 11) 1955. 3. Bollet, A. J. *et al.*, *J.A.M.A.* 158:459 (June 11) 1955.

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PHYSICIAN PLACEMENT

The following physicians have expressed a desire to locate in Oklahoma. To the best of our knowledge, the names, addresses, qualifications and availability are current and accurate.

Additional information concerning most of these physicians is available in this office. Anyone interested in contacting these physicians may do so directly or may use the state office as an intermediary.

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

Internal Medicine

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Pathology

Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, George Washington University, 1950, will finish four years pathology residency in January, 1957.

Pediatrics

David Goldstein, 66 Lafayette Ave., Staten Island 1, N. Y., age 38, Long Island College of Medicine, 1949, two year residency in pediatrics, Board certified, available after Oct. 1, 1956.

Surgery

Edward Wendell Foster, 147 W. Main, Meriden, Conn., age 62, Harvard University School of Medicine, 1924, certified by specialty board, veteran, available now, would consider surgery, obs.-gyn., or general practice.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available Jan. 1, 1957.

Boyd M. Saviers, 514 Lacewood Dr., Dallas, Texas, age 33, University of Oklahoma, 1947, finishing third year residency at Methodist Hospital of Dallas, veteran, available September, 1956.

Richard A. Walsh, 250 Fourth St., Elyria, Ohio, age 31, New York University, 1948, completed Part I, American Board of Surgery.

Urology

Harry Emanuel Fisher, Jr., Box 161, Barnes Hospital, St. Louis 5, Missouri, age 33, University of Oklahoma, 1952, veteran, available July 1, 1956.

Henry Ernest Wolfe, Jr., 879 Rosewood Ave., Vallejo, Calif., age 34, Albany Medical College, 1947, board qualified in urology, available upon separation from active duty, Aug. 15, 1956.

Books Received

CIBA FOUNDATION. COLLOQUIA ON AGEING. Vol. 2, Ageing in Transient Tissues. Editors, G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.C.H. and Elaine C. P. Millar, A.H.W.C., A.R.I.C. 96 Illustrations. Little, Brown and Company, Boston, 1956.

AMERICA'S HEALTH—A report to the Nation by The National Health Assembly. Copyright, 1949, by Harper and Brothers.

CANCER—A Manual for Practitioners. Third Edition. Published by American Cancer Society (Massachussets, Division), Inc. Boston 16, Massachusetts, Copyright, 1956.

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Each tablet contains:			
	Aspirin	200 mg.	(3 grains)
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*Bonica, J.J.; and Backup, P.H.: Northwest Med., 54:22, Jan. 1955.

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Editorials

Joe N. Hamilton

The press of Oklahoma has been lavish in its tributes to Joe Hamilton on the occasion of his retirement as executive secretary of the Oklahoma Society for Cripple Children, a post which he has held since 1925. He richly deserves all of them and much more. He has for over 30 years been Mr. Cripple Children's Society. The designation implies a limitation and there is no limit to the good that is in the man nor has there been a limit to his interest in all phases of human welfare in Oklahoma.

This interest accompanied by a high order of intelligence and understanding has made him the best public relations man Oklahoma medicine has ever had. The work of the Society began when roads were bad, automobiles slow and temperamental, tires were high pressure ones easily punctured by horse shoe nails and when people in small towns and on the farms were often isolated and quite unaware of developments outside their immediate environment. Radios were few, talking pictures were still in the future and the World Series was followed on a blackboard in front of the newspaper office. Many of the men practicing medicine in what had been Indian Territory had had little formal medical education and had been licensed to practice under the grandfather clause.

These were the people that Mr. Hamilton and his teams went among to set up clinics for the evaluation of children who were crippled. Nothing could come of this unless remedial measures could be instituted where indicated. This meant that the medical profession and its worth had to be sold to the parents and very often to grandparents, uncles and aunts. Not infrequently two or three visits a year apart to the clinic would be necessary before the parents could be convinced. The growth and development of the program and the extension of its services to include all forms of crippling is ample proof of a good job of selling.

In his final letter to the members and friends of the Oklahoma Society for Crippled Children, Mr. Hamilton gives some idea of the scope of lay interest in things medical that has been stimulated by him.

"Many official and voluntary organizations and institutions have lent encouragement and contributed materially to the crippled children's program. Special acknowledgments are due the State Department of Education, including particularly the Division of Vocational Rehabilitation; the Oklahoma Commission for Crippled Children; the Oklahoma Hospital for Crippled Children; the State Health Department; the State Department of Public Welfare and the Federal Children's Bureau. Also, much credit is due the Oklahoma Hospital Association, Oklahoma Medical Association, Oklahoma Educational Association, the Tuberculosis Association, Social Welfare Association, National Polio Foundation, Red Cross, the Shriners, the Oklahoma Coaches Association, the various men's civic clubs, and the many women's organizations including Junior Leagues' farm study groups and the Tulsa Cerebral Palsy Association.

"I desire to call special attention to the contributions of churches of Oklahoma and to the Oklahoma press. For 30 years, facilities of the various church plants have been made available without charge for diagnostic crippled children's clinics. The various papers of the State have given liberally of both their editorial and news space to the promotion of crippled children's clinics and of Easter Seal sales. The same words of appreciation can be heartily extended to our broadcasting stations.

"In my final official letter to the membership and other friends of the Oklahoma Society, it would be amiss if I did not pay special tribute to the one man, who for more than thirty years paid me for doing what I should like to have done anyway. The reference, of course, is to the late L. H. Wentz, formerly a fellow citizen and Rotarian at Ponca City ,who in the latter part of 1925, invited me to become executive secretary of the then newly organized So-

ciety for Crippled Children. He agreed to underwrite the project financially. Not only did he do this consistently, but he contributed liberally of his personal time and energies in the development of a state-wide program. During his lifetime, he served as director and treasurer of the Society."

We, of the profession, wish to extend our thanks to Mr. Hamilton not only for the things he has done for the crippled child but also for making the public aware of the fine things medicine has to offer to the crippled and unwell of all ages. No man has done more to blend the knowledge and know-how of the profession and the interest of the lay public into a force for improving physical welfare. Mr. Hamilton is and has been one of the first people of Oklahoma and all who know him regret that he has reached the age of retirement.

Our New Home

As I audited a council meeting yesterday, the first one in the new building, my mind kept wandering from the proceedings to the meaning of it all.

The profession as it has been in Oklahoma is perishable. Time drops us off the vine. It is difficult even for us who are part of it to grasp permanency out of an intangible represented only by the human being. How much more difficult must it be fore a lay person or members of a lay organization to see solidarity and permanency in an organization whose existence is known only by the members known to them.

The new building is a material thing, beautifully designed and located and functionally near perfect. It cost each of you 35 dollars. But you, the administration and the building committee have created a picture in the minds of the doctor and of the public of a permanent structure which is not the building but the medical profession itself. It should go a long way toward driving home to the doctor and to the public the responsibility in perpetuity that the State Association feels toward all matters that have to do with the health of the community which its members serve.

If you have been irked by assessment levied by the House of Delegates pay your new home a visit. If you moan for the young man who has to also pay it, just bring him or send him for a visit too. If you think it is too far from you, think where you could have placed it that it could better serve the purpose for which it is intended. It is on the highway 66 By-pass, which joins the Turner Turnpike, highway 77 By-Pass and highways 74, 3 and 270 on the northwest and is only a short distance north of highway 62 as it passes the State Capitol. One could not have found a location in the capitol city more accessible to members driving in from everywhere in the State.

Open House Planned

Members of the Association will soon be invited to attend an open house and dedicatory ceremony at the new State Headquarters Building. Slow delivery of new furnishings prohibits the establishment of a definite date at this time. Personal invitation will be sent to each member well in advance.

Scientific Articles

FLUID *and* ELECTROLYTE *Problems in Clinical Medicine*

HELEN EASTMAN MARTIN, M.D., and TELFER B. REYNOLDS, M.D.

This article appeared in the Medical Bulletin of the University of Southern California, April, 1956. Because of the quality of the material and the clarity of its presentation, permission was requested to reprint it for the profession in Oklahoma through the Journal. This permission was kindly granted by the editor.

In 1950 a general article on fluid and electrolyte problems[1] was presented in this journal. Since that time there has been considerable expansion of knowledge concerning these problems, both at the basic and clinical level. As there are now several excellent short and long books in this field[2, 3, 4, 5] it is not the purpose of this article to present a short general review of the subject. However, it is our purpose to present briefly two topics of considerable clinical interest (osmolarity and the sodium problem and acid-base relationships) in which there has been enough new knowledge added or re-orientation of knowledge to make discussion worthwhile. The authors have drawn heavily on standard works in the field of fluid and electrolyte metabolism, augmented by their own experience.

Osmolarity, Sodium and Distribution of Body Water

As laboratory measurements of electrolytes in serum are expressed as concentrations—so many milliequivalents per liter—much of the clinical thinking about electrolytes has centered around alterations of concentration of any given electrolyte. Due to difficulties of determination of total body water, or even plasma or blood volume for immediate clinical use, clinicians frequently have not thought about total amounts of electrolyte in the body. The serum concentrations alone do not tell us whether there is a normal, increased, or decreased amount of any electrolyte. Only a clinical estimate of the state of body hydration, plus the estimation of internal distribution of body water, will help us—so that we can multiply volume by concentration to see if there is an increased, normal, or decreased total amount of electrolyte.

In the last analysis the *osmolarity* of the blood governs, via complicated pathways, the retention or rejection of water and hence electrolyte concentrations.

What do we mean by osmolarity?

An effective osmotic pressure is exerted only when there is a membrane (here, the cell membrane) which is permeable to the solvent (H_2O here) but not to all the solutes (here, sodium) and is governed by the number of particles in solution, not by weight or valence.

A few definitions will clarify these differences. A *mol* is the gram molecular weight of a substance. An *osmol* is the gram molecular weight of a substance divided by the number of ions into which it dissociates in a solution. As sugar does not dissociate in solution, one mol = 1 osmol, but a substance such as sodium chloride that almost completely dissociates into sodium and chloride in solution has 2 osmols for every gram molecular weight in solution.

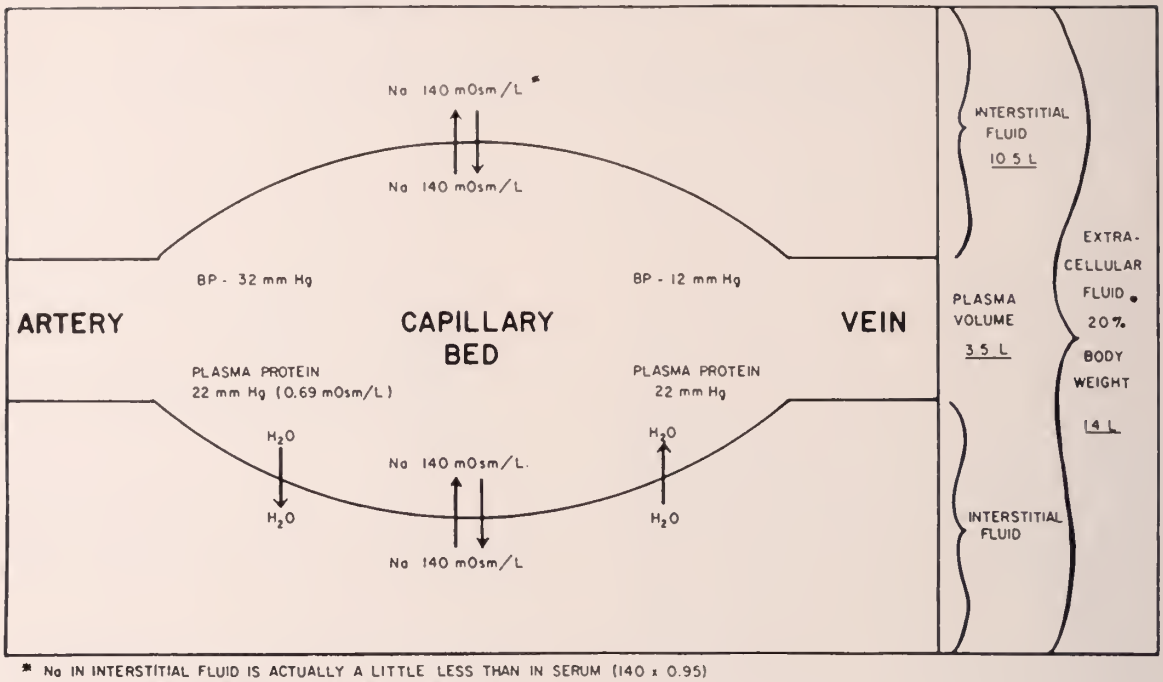
one mol = 2 osmols

$NaCl \quad Na^+ + Cl^-$

A *milliosmol* is 1/1000 of an osmol. A *milliequivalent* is a means of quantitating electrolytes, which ignores their mass and takes into account only their electrical charge. An equivalent weight therefore is defined as a gram-ionic weight if the valence is one, or half a gram-ionic weight if the valence is two, etc. The strength of a solution with regard to an electrolyte is usually expressed as milliequivalents per liter.

DIAGRAM 1

FLUID MOVEMENT BETWEEN BLOOD VESSELS AND INTERSTITIAL FLUID



* Na IN INTERSTITIAL FLUID IS ACTUALLY A LITTLE LESS THAN IN SERUM (140 x 0.95) BECAUSE OF GIBBS-DONNAN EFFECT OF NON-DIFFUSIBLE PROTEIN

The following illustrations (Tables 1 and 2) will point up these differences between weight (mgms), electrical charge (equivalence), and particles in solution (osmolarity).

I. Sodium and Blood Volume

A study of Diagram 1 shows clearly that the osmolarity of sodium does not govern water movement between the plasma and interstitial fluid as sodium can move freely between these two compartments. The plasma proteins which cannot leave the vascular bed, and thus have an effective osmolarity because of this and the hydrostatic pressure (the blood pressure), govern movement of water out of and into the capillaries according to the pressure gradient in the Starling hypothesis (see Diagram 1).

Indirectly the concentration of sodium does influence plasma and total extracellular volume, for when the serum sodium rises above normal there is hyperosmolarity. This affects the osmolar receptors of the hypothalamic area and causes an increase of antidiuretic hormone and H_2O retention, to restore osmolarity and concentration. Conversely, when there is a low serum sodium there is decrease of antidiuretic hormone and H_2O excretion. Also, as discussed in detail later, changes of osmolarity of the serum govern water movement into and out of cells. Volume becomes more important than concentration when there is threat of loss of extracellular volume—particularly blood volume—as the homeostatic mechanisms of the body are all set with stress and fluid loss to conserve sodium and water to the body. The mammalian kidney represents a long evolutionary development from the saline envir-

TABLE 1

Comparison of Weight, Equivolence and Osmolarity

	Millimols (mgm)	Valence	Milli-equivalents	Milli-osmols
Sodium	23	1	1	1
Calcium	40	2	2	1
Glucose	180	—	—	1
Albumin }	70,000	varies	23	1
Globulin }	160,000	with pH		

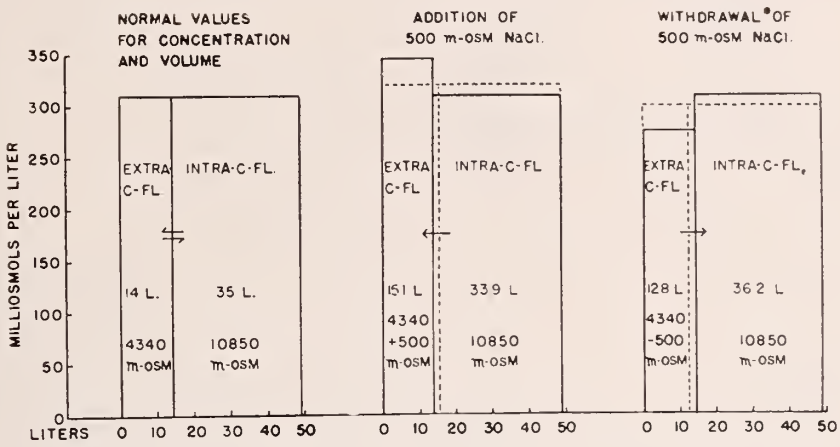
TABLE 2

Comparison of Weight, Equivolence and Osmolarity in Serum

	mg/100 cc	mEq/L	mOsm/L
Sodium	330	143	143.0
Calcium	10	5	2.5
Glucose	100	—	0.55
Protein (albumin globulin)	65,000	16 (at pH of serum)	0.69

DIAGRAM 2

THE DARROW — YANNET DIAGRAM



(Courtesy J. L. Gamble: *Chemicol Anotomy, Physiology, and Pathology of Extracellular Fluid*, Cambridge, Harvard University Press[6])

onment of the sea to the sodium deficient environment of the air and earth. The kidney, primed by hormonal influences—activation of sodium-retaining hormones under stress situations—responds by maximal sodium retention.

II. Sodium as the Distributor of Total Body Water

It is assumed that the osmolarity of the extra- and intracellular compartments is the same. As sodium cannot enter the cell, except in small amounts, but water can, the osmolarity of sodium will govern the movement of water*, in order to equalize the osmolarity of the two compartments (see Diagram 2).

Thus, if sodium is added to the extracellular compartment the osmolarity rises higher than in the cells and water moves from the cells until the extracellular and intracellular osmolarity equalizes at a higher than normal figure. To illustrate, if the extracellular osmolarity is increased by the addition of 500 m Osm/L of NaCl (about 15 grams) without water, in order to equalize intra- and extracellular osmolarity water will move out of the cells as per the following calculations:

*The movement of water is, of course, determined by the difference between the total osmolarity due to sodium and associated ions in the extra-cellular fluid, and potassium, protein, magnesium, and associated ions within the cell. Shifts in water can be produced by changes in the total amount of osmotically active material inside the cell (due to changes in potassium, magnesium, phosphate, or changes in pH). However, changes in sodium in the extracellular fluid are of primary importance, and other factors are assumed to be unchanged in the present discussion.

Total m Osm in body normally

Extracellular

$14L \times 310 \text{ m Osm/L} = 4340 \text{ m Osm}$

Intracellular

$35L \times 310 \text{ m Osm/L} = 10850 \text{ m Osm}$

Total body fluid

$49L \times 310 \text{ m Osm/L} = 15190 \text{ m Osm}$

1. New temporary osmolarity of extracellular compartment

$$\frac{4340 + 500}{14L} = 346 \text{ m Osm/L}$$ (increase in osmolarity)

2. New Total osmolarity/L in all body fluid

$$\frac{15190 + 500}{49L} = 320 \text{ m Osm/L}$$

3. Adjusted volume of extracellular compartment

$$\frac{4340 + 500}{320} = 15.1 \text{ Liters}$$

New extracellular volume = 15.1 Liters (gain 1.1 L)

New extracellular osmolarity = 320 m Osm/L

New intercellular volume = 33.9 Liters (loss 1.1 L)

New intracellular osmolarity = 320 m Osm/L

If sodium without water is lost from the extracellular compartment, osmolarity falls and water moves into the cells until the two compartments' osmolarity is similar, but lower than the normal level. To illustrate, if 500 m Osm of NaCl are lost from the ex-

TABLE 3

Serum Sodium Levels on Entry in 19 Patients in Diabetic "Coma"

Serum Sodium Level		
Over 145 mEq L	Normal 135-145 mEq L	Under 135 mEq L
11 patients	5 patients	3 patients

tracellular compartment, water will move into the cells as per the following calculations in order to equalize intra- and extracellular osmolarity:

Total m Osm in body normally

Extracellular

$14L \times 310$ m Osm/L = 4340 m Osm

Intracellular

$35L \times 310$ m Osm/L = 10850 m Osm

Total body fluid

$49L \times 310$ m Osm/L = 15190 m Osm

1. New temporary osmolarity of extracellular fluid

$$\frac{4340 - 500}{14} = 274 \text{ m Osm/L (decrease in osmolarity)}$$

2. New total osmolarity/L in all body fluid

$$\frac{15190 - 500}{49} = 300 \text{ m Osm/L}$$

3. Adjusted volume of extracellular compartment

$$\frac{4340 - 500}{300} = 12.8 \text{ Liters}$$

New extracellular volume = 12.8 Liters (loss 1.2 L)

New extracellular osmolarity = 300 m Osm/L

New intracellular volume = 36.2 L (gain 1.2 L)

New intracellular osmolarity = 300 m Osm/L

III. Clinical Interpretation of Serum Sodium Levels

If the extracellular volume varies and the total body sodium remains the same, one could have low or high serum sodium levels depending on H_2O increase or loss. Conversely, if the extracellular volume remains normal and total body sodium varies, one could have low or high serum sodium levels depending on sodium increase or loss. If both extracellular volume and total body sodium vary one can have normal, low, or high serum sodium levels (see Diagram 3).

Clinical Significance of Serum Sodium Levels

Does the serum sodium level reflect total body sodium?

As indicated above, unless the fluid volumes or total body sodium levels are known, serum sodium levels only tell concentration.

TABLE 4

Serum Sodium Levels in 19 Patients with Gastrointestinal Fluid Loss

Diagnosis	mEq/L Serum Sodium		
	High over 145 No. Pts.	Normal 135-145 No. Pts.	Low under 135 No. Pts.
Vomiting due to pyloric obstruction	3	5	1
Vomiting due to other causes	1	1	
Diarrhea		2	2
Intestinal obstruction		1	2
Bile peritonitis			1

This can be documented by experiences in patients who have lost or gained sodium and water. All would concede that patients in serious diabetic ketosis and acidosis have lost body sodium with the polyuria attendant upon hyperglycemia and glycosuria. Table 3 shows the entry serum sodium levels in 19 patients with diabetic coma. Eleven of the patients or 58 per cent had low levels, 5 of the patients or 26 per cent had normal levels, and 3 of the patients or 16 per cent had high levels, despite the fact body sodium was depleted in all.

Table 4 shows the serum sodium levels in a group of patients—all with deficits of body sodium and water due to gastrointestinal fluid loss. Four of these patients or 21 per cent had high serum sodium levels, with depleted body sodium levels; 9 of these patients or 47 per cent had normal serum sodium levels despite decrease in total body sodium and 6 of these patients or 31 per cent had low serum sodium levels associated with low total body sodium.

Table 5 shows the serum sodium levels in a group of patients with oedema due to a variety of causes, all of whom had obvious increases of total body sodium and water. Ten of these patients or 62½ per cent had a low serum sodium, despite increased total body sodium, and 6 or 37½ per cent had normal serum sodium levels, despite an increase in total body sodium.

TABLE 5

Serum Sodium Levels in Patients with Oedema

Category	mEq/L Serum Sodium	
	Normal 135-145 No. Pts.	Low under 135 No. Pts.
Congestive heart failure	5	7
Cirrhosis with ascites and oedema	1	2
Nephrotic syndrome		1

DIAGRAM 3

Relation of Serum Sodium Concentration to Changes in Extracellular Volume or Total Body Sodium

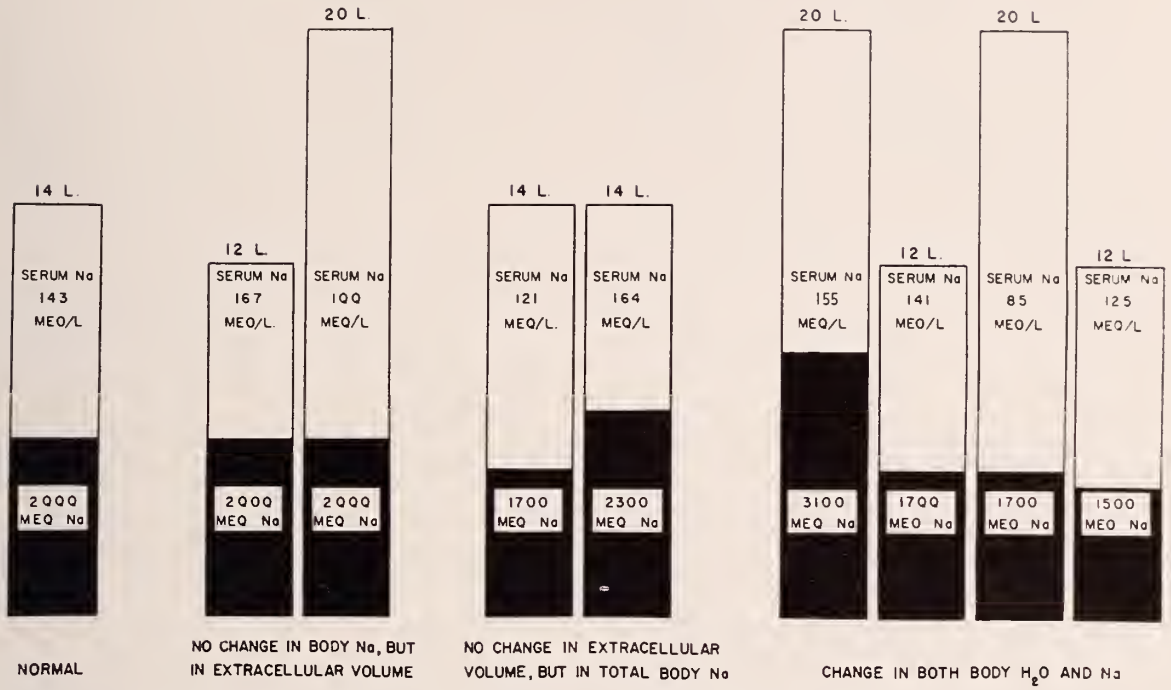


Table 6 plus the history of water and electrolyte gain or loss (vomiting, diarrhea, weight gain, excess sweating, polyuria or oliguria), plus the physical impression of the patient as to presence of oedema, dehydration, or normal hydration, plus the hematocrit, or total protein, and the urea or non protein nitrogen level, should make it possible to interpret most serum sodium levels.

Interpretation of a serum sodium level as to deficit or excess of body sodium, distribution of body water, and treatment of the patient may be considered as follows:

1. Low Serum Sodium

The serum sodium may be low with high, normal or low total body sodium (see also Diagram 3).

Category 1. When the serum sodium is low, plus low hematocrit and total protein, and *there* is *no oedema*, total body sodium is presumably normal and the low serum sodium is due to water retention. This is seen commonly immediately postoperatively—and is thought to be due in part to activation of antidiuretic hormone with oliguria and water retention[4]. The treatment here is not *extra* sodium, but just the usual maintenance amount of sodium plus that lost, and no overloading with water.

Category 2. When the serum sodium is low, the hematocrit and total protein low, and *there is oedema,* total body sodium and water are increased. This situation may be seen in oedematous states, as congestive heart failure, cirrhosis, and nephrosis, where there may be either an isotonic expansion of extracellular fluid or a hypotonic expansion with retention of more water than sodium. The treatment is to eliminate both water and sodium via diuretic therapy—plus some restriction of water. *Hypertonic sodium solutions should not be used* as the body already contains too much sodium and pulmonary oedema may be precipitated by increasing the osmolarity of the extracellular fluid and drawing water out of the cells (see Diagram 2).

Category 3. When the *serum sodium* is low, with increased hematocrit or total pro-

TABLE 6

Interpretation of Serum Sodium Levels

Category	Serum Na Level	Total Body Na Level	Total Body H_2O Level	Urea N or NPN Level	Hematocrit	Total Protein	Type of Change	Clinical Condition	Therapy
1.	Low ↓	Normal	Increased ↑	Normal or low	Low ↓	Low ↓	Hypotonic expansion due to retention of H_2O	Immediate post-operative states	Nothing, except maintenance fluid and fluid lost
2.	Low ↓	Increased ↑	Increased ↑	Normal or low	Low ↓	Low ↓	Hypotonic expansion due to retention both H_2O and Na, but more H_2O than Na	**Oedematous states:** congestive failure, cirrhosis, nephrosis	Diuretic Rx. Na restriction H_2O restriction occasionally
3.	Low ↓	Low ↓	Low ↓	Increased ↑	Increased ↑	Increased ↑	Hypotonic contraction with loss of more Na than H_2O	**States of fluid loss** G.I. Fluid: (vomiting, diarrhea, etc.) Polyuria*	Na containing fluids—usually isotonic. Rarely hypertonic
4.	Normal	Increased ↑	Increased ↑	Normal or low	Low ↓	Low ↓	Isotonic expansion	**Oedematous states:** congestive failure, cirrhosis, nephrosis	Diuretic Rx. Na restriction
5.	Normal	Low ↓	Low ↓	Increased ↑	Increased ↑	Increased ↑	Isotonic contraction	**States of fluid loss** G.I. Fluid: (vomiting, diarrhea, etc.) Polyuria*	Isotonic Na containing fluids, type depending on acid-base balance
6.	Increased ↑	Normal	Low ↓	Normal or increased	Increased ↑	Increased ↑	Hypertonic contraction with loss of H_2O	H_2O deficits in patients unable to drink	Hypotonic solutions or glucose in H_2O
7.	Increased ↑	Low ↓	Low ↓	Increased ↑	Increased ↑	Increased ↑	Hypertonic contraction with loss or more H_2O than Na	**States of fluid loss** G.I. fluid (vomiting, diarrhea, etc.) Polyuria*, excess sweat	Isotonic Na containing fluids. Rarely hypotonic
8.	Increased ↑	Increased ↑	Increased ↑	Normal or low	Low ↓	Low ↓	Hypertonic expansion with more Na than H_2O retention	**Oedematous states:** congestive failure, cirrhosis, nephrosis	Diuretics, Na restriction ? Force H_2O

*Polyuria as used here means loss of both sodium and water.

tein, an elevated NPN and there is evidence of dehydration, there is a deficit of body sodium. This state is seen when there has been loss of both water and sodium. There can be an isotonic, hypotonic or hypertonic loss of extracellular fluid. If more sodium than water is lost there will be a hypotonic contraction with low serum sodium. This condition may be seen where there is loss of gastrointestinal fluid of any type or any type of polyuria associated with sodium loss. Treatment consists of the use of isotonic sodium-containing solutions; very rarely a combination of isotonic and hypertonic sodium solutions is required if the sodium deficit is marked.

2. Normal Serum Sodium

Category 4. When the serum sodium is normal, with low hematocrit or total protein and *there is oedema*—total body sodium is increased. Therapy here should be the use of diuretics for elimination of sodium and water, and sodium restriction.

Category 5. When the serum sodium is normal, with increased hematocrit, total protein and elevation of NPN or urea, and there is clinical evidence of dehydration, *there is a deficit of body sodium* due to isotonic *contraction of extracellular volume.* This is seen in conditions of dehydration (vomiting, diarrhea, polyuria). The treatment here is use of isotonic sodium-containing fluids—the type depending on the state of acid-base balance and the presence or absence of impaired renal function.

3. Elevated Serum Sodium

When the serum sodium is elevated there may be low, normal, or increased body sodium (see Diagram 3).

Category 6. When the serum sodium is increased and the hematocrit and total protein are low and there is oedema, there is an increase of total body sodium. This condition occurs occasionally in congestive failure— where more sodium than water is retained. Treatment consists in diuretics to remove sodium plus adequate water intake.

When the serum sodium is increased and the hematocrit and total protein are elevated, there may be normal body sodium (Category 7) or low body sodium (Category 8).

Category 7. Represents conditions of

water deficit—with little or no sodium loss. This is seen in patients who are unable to drink or obtain water. Here water must be supplied, as glucose in water or in hypotonic solutions.

Category 8. Represents states of fluid loss (vomiting, diarrhea, polyuria) where there has been a loss of both water and sodium, but more water than sodium. Here isotonic and hypotonic solutions should be used.

Thus it is seen that in the two great groups of clinical disorders affecting sodium and water balance

(1) Loss of water and electrolyte and

(2) Retention of water and electrolyte

there may be normal, low or elevated serum sodium levels, depending on whether the gain or loss has been equal for sodium and water, or more water than sodium, or more sodium than water. This means then that the serum level can only be interpreted as to total change in body sodium by assessing the expansion or contraction of body fluid—by physical estimate of normal hydration, dehydration or oedema, and evidence of dilution or contraction of extracellular volume as indicated by hematocrit, total protein and NPN or urea nitrogen. It must be pointed out, however, that the hematocrit and total protein may not be helpful if they have been previously altered by anemia, malnutrition, or blood loss. The NPN or urea nitrogen may be used only if there is no known previous renal disease or in retrospect, as to change with hydration. This means the clinical estimate of hydration, plus the primary cause of fluid imbalance, is often the only means of assessing the significance of serum sodium levels.

IV. Treatment

It is obvious from the previous discussion then that one does not treat the serum sodium level per se, but the patient, and the underlying cause of alteration of body fluid and electrolyte.

The Low Sodium Syndrome. There has been considerable discussion concerning the low sodium syndrome and hyponatremia. Hyponatremia is used incorrectly if it is used to include symptoms. By definition hyponatremia means only a *low serum sodium.* Normal, high or low serum sodium levels may be associated with no symptoms or certain symptoms.

At the present time we do not know whether symptoms which have been defined as due to low sodium are related to levels of body sodium, relation between serum concentrations and total levels, or the serum levels alone. Most of the symptoms of the so called "low sodium syndrome" (weakness, fatigue, muscle cramps, confusion to coma, and hypotension) could be attributed to decreased blood volume, and decreased cardiac output. It is difficult to separate the volume effects from the ion effects, as sodium so largely controls fluid balance. To date no experiments have been done showing the effects of sodium alone.

States of Dehydration are most apt to give symptoms of the low sodium syndrome. Such states are best treated by isotonic sodium-containing fluids, and where indicated, plasma.

States of Overhydration with hyponatremia (particularly congestive heart failure) are very rarely associated with the symptoms of the low sodium syndrome, and *should not be treated with sodium-containing solutions, particularly hypertonic solutions,* as pulmonary oedema may be precipitated.

High serum sodium levels due to water lack indicate need for glucose in water, when total body sodium is normal. If due to loss of extracellular volume, isotonic or hypotonic sodium-containing solutions should be used (see below).

Tonicity of Fluids. Fluids are divided into isotonic, hypotonic and hypertonic—indicating an osmolarity that is equal, less than or more than that of blood plasma.

While glucose in water is isotonic to blood due to the glucose content, it does not reconstitute extracellular volume — since the glucose is used for metabolism and the water runs out in the urine, as it does not remain in the body without sodium, except in unusual circumstances.

Hypertonic Solutions. Due to their increased osmolarity these solutions are used as diuretics—due to their effect in drawing water out of the cells (see Diagram 2), and due to the increased osmolar load presented

to the kidneys against which water cannot be reabsorbed in the kidney tubule. A very definite contraindication to the use of hypertonic solutions is cellular dehydration, as further depletion of cell water may result. Hypertonic saline is rarely indicated in the treatment of sodium deficits unless there is such a large deficit of total body sodium that there would be a tremendous gain in weight if the deficit were made up entirely with isotonic saline.

The Role of Hypotonic Sodium-Containing Solutions is still to be determined, as to whether they should be used where there is both cellular and extracellular dehydration. How much of the extra water will be retained has not been determined. They do provide extra water if there is an increased osmolar load in the urine, as with glycosuria.

Isotonic Sodium-Containing Solutions. In general, if renal blood flow can be restored the kidney can handle the relative retentions of sodium and water. To this end, in most situations of sodium deficit, isotonic solutions of sodium are usually adequate.

Calculation of Sodium Deficits. It is obvious from the above considerations that it is impossible to calculate the body sodium deficit from serum levels alone—as the serum level may be high, normal or low.

If one desires to calculate the sodium required to correct a low serum sodium level the deficit per liter of sodium must be multiplied by an assumed total body water (42 liters) rather than by extracellular volume (14 liters), since sodium governs total movement of body water due to its osmolar effect.

Example:

Serum sodium level	125 mEq/L
Normal serum sodium level	135 mEq/L
Deficit	10 mEq/L

10 mEq/L × total body water (42 L) =
420 mEq Na = 9.7 gm Na = 24 gm NaCl

However, one must replace the amounts of sodium calculated cautiously, and *give* ⅓ *or* ½ the *calculated* amount originally — then check the patient and the chemistry. This is due to the fact that movement of water which may be primarily responsible for a low serum sodium is affected by sodium administration, and water diuresis may occur. More basically the inability to use calculations is due to the fact that normal homeostatic mechanisms are altered when concentrations are disturbed, and *the serum* level *alone,* as indicated throughout this paper, can lead one astray as to deficits or excesses, or their extent.

ACID-BASE BALANCE

The proton theory of acids and bases developed by Bronsted has been found to provide a better explanation for observed phenomena in the body that the older theory of Arrhenius and has rendered the older terminology obsolete. Proper attention to semantics and knowledge of a few simple chemical concepts greatly facilitate understanding of acid-base balance in the body.

Definitions and Chemical Concepts

Acid

An acid is defined as a compound which when placed in solution dissociates to provide free hydrogen ions or protons (fig. 1). The greater the tendency to form free hydrogen ions the stronger the acid. As examples, hydrochloric acid (HCl) is a strong acid which freely dissociates into hydrogen (H^+) and chloride (Cl^-) ions (fig. 2). Ammonium (NH_4^+) is a weak acid dissociating only slightly into hydrogen ions (H^+) and ammonia (NH_3) (fig. 3).

The acidity of a solution refers to the amount of hydrogen ion (H^+) free in the solution and is often expressed as the reciprocal of the logarithm of the hydrogen ion concentration (pH).

There is a tendency in the older literature to refer to all negatively charged ions or anions (such as Cl^-, SO_4^{2-}, etc.) as acids. This is chemically incorrect.

Base

A base is defined as a substance which has a tendency to combine with hydrogen ions removing them from solution. The strength of this tendency measures the "strength" of the base. Examples are hydroxyl ion (OH^-) or ammonia (NH_3) as strong bases and chloride ion (Cl^-) as a very weak base. By this terminology, then, an acid will always consist of hydrogen ion combined with a base.

Sodium (Na^+) and potassium (K^+), commonly called bases in the older terminology, are best called cations.

Law of Mass Action and Reversible Reactions

At a constant temperature the rate of a reaction involving gases or ions is proportional to the concentration of each kind of molecule or ion taking part in the reaction.

i.e.: $H^+ + HCO_3^- \rightarrow H_2CO_3$

Doubling the concentration of H^+ will double the number of collisions between H^+ and HCO_3^- and so double the rate of formation of H_2CO_3.

For reactions that are reversible the principle of dynamic equilibrium applies.

i.e.: $H^+ + HCO_3^- \rightarrow H_2CO_3$

and $H_2CO_3 \rightarrow H^+ + HCO_3^-$

Such a reaction comes to equilibrium when the rate of formation of H_2CO_3 and its rate of breakdown are equal.

Then $H_2CO_3 \leftrightarrows H^+ + HCO_3^-$

At equilibrium the product of the concentrations of H^+ and HCO_3^- divided by the concentration of H_2CO_3 is a constant value for a given temperature and is spoken of as the dissociation constant for the compound in question. Such a dynamic equilibrium, if any stress is placed upon the system, will adjust itself to maintain equilibrium by reacting in the direction that relieves the stress (Le Chatelier law).

For example: $H_2CO_3 \leftrightarrows H^+ + HCO_3^-$

If H^+ is added to the equilibrium mixture the reaction will shift to the left. The rate of formation of H_2CO_3 will be increased until a new balance is achieved. In the final equilibrium mixture there will be more H_2CO_3 and less HCO_3^- than in the beginning and less H^+ than was added. There would be a similar shift to the left if HCO_3^- were added. If H_2CO_3 were removed from the equilibrium mixture a shift to the left would also occur resulting in a drop in H^+ and HCO_3^- concentrations and replacement of some of the removed H_2CO_3.

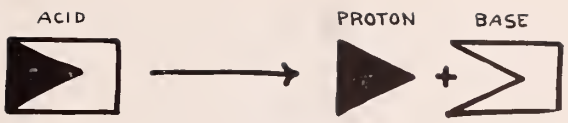


Figure 1

A shift in the reaction to the right would result from the addition of H_2CO_3 or the removal of H^+ or HCO_3^-.

As an example the ionization of H_2CO_3 is depicted in Figure 4. At equilibrium a moderate acidity exists resulting from the innate tendency of H_2CO_3 to dissociate. The addition of a large surplus of $NaHCO_3$ to the solution, by forcing the reversible reaction to the left, would greatly decrease the concentration of H^+ in the mixture and increase the amount of H_2CO_3 (fig. 5).

Acids and Bases in the Body

Since our body fluid is a water solution there are of necessity both hydrogen and hydroxyl ions present it it. The quantity of free hydrogen ion in water is very small and stable, however, and there would be no problem were it not for the necessity of transporting considerable amounts of relatively strong acidic substances through the body. Chief among these is carbonic acid (H_2CO_3), formed by the interaction of CO_2 produced in cell metabolism, and H_2O. ($H_2O + CO_2 \rightarrow H_2CO_3$.) Other and stronger acids are H_2SO_4 and H_3PO_4 which result from the oxidative metabolism of phosphorus and sulfur-containing proteins. Any of these acids if loosed in a water solution in even small amounts would dissociate sufficiently to produce free hydrogen ion concentrations many times greater than .00000004 gms per liter (the concentration of H^+ in body fluids).

Since marked variations in H^+ concentration are incompatible with proper function-

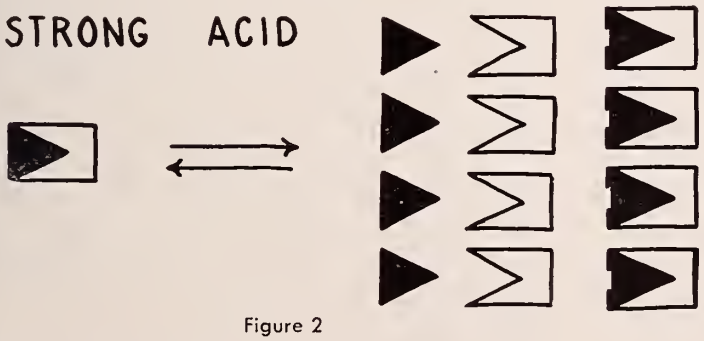


Figure 2

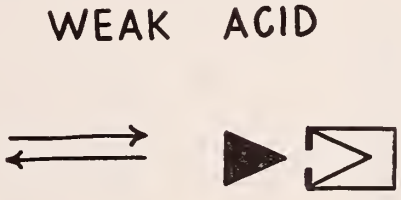


Figure 3

ing of many enzyme systems and other cellular processes, a protective mechanism has evolved in our bodies to minimize potential shifts in H^+ concentrations. There are in the body large amounts of moderately strong bases: HCO_3^-, Hb^- (ionized hemoglobin), and Pr^- (ionized proteinate), and smaller amounts of PO_4^{3-} and HPO_4^{2-}. The tendency of the acids to dissociate into free hydrogen ions is counterbalanced, according to the laws of mass action, by the tendency of the surplus of bases to combine with the free hydrogen ions. All of the common acids in the body have their ionization into H^+ depressed by the presence of large amounts of their constituent bases.

The final equilibrium mixture is such as to satisfy all the mass action equations involving H^+, base and acid. The H^+ ion is in equilibrium with all of the acids and bases since it can presumably pass cell membranes freely even though some of the bases may be fixed within or without the cells (fig. 6).

Remember that wherever there is a negatively charged ion there must of necessity be a positively charged one. The cation partners of these bases are largely Na^+ (for those in the extracellular space: HCO_3^-, PO_4^{3-}, HPO_4^{2-}) and K^+ (for those in the intracellular space: Pr^-, HPO_4^{2-}, and Hb^-).

This sort of a mixture is called a "buffered" one since it strongly resists changes in hydrogen ion concentration. Large amounts of hydrogen ion can be added without marked increase in acidity because of the large surplus of bases available. Of course as the supply of bases is decreased and the amount of unionized acid is increased some drop in pH will occur. The addition of strong base to the mixture will have the effect of removing H^+ by combination with the base. As H^+ concentration drops, however, all of the unionized acids

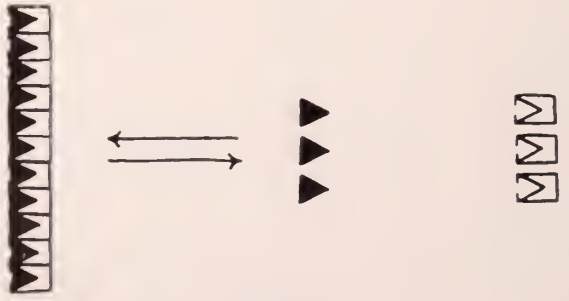


Figure 4

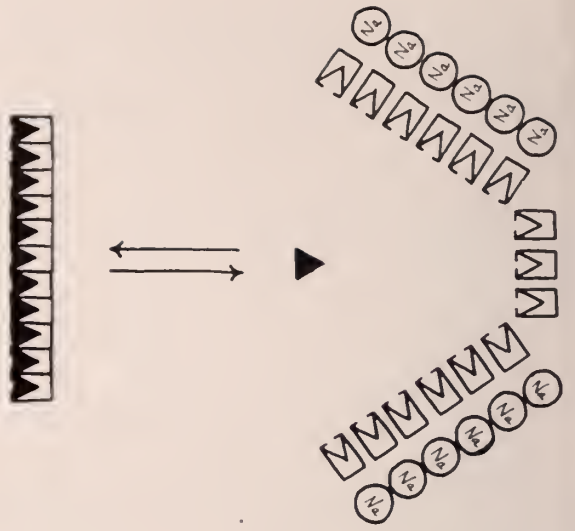


Figure 5

will release H^+ and the alkalinizing effect of the added base will be minimized.

Even though it is a well buffered solution our body fluid could not stay long at the same pH without added protective mechanisms. The constant addition of H_2CO_3, H_2SO_4, and H_3PO_4 from metabolism in addition to organic acids that we can not adequately measure would soon lead to a depletion of bases, a surplus of acids and increased hydrogen ion concentration. This accumulation of acids is prevented by their elimination via the lungs or kidney after being transported through body fluids.

Acid-Base Function of the Lungs

H_2CO_3 is continually eliminated via respiration at approximately the same rate that it is produced in the tissues. The amount of H_2CO_3 in the blood is a function of the ventilatory rate. When for any reason hydrogen ion concentration in the body increases, the respiratory center is stimulated and the carbonic acid blood level is decreased. If, at any time, the blood hydrogen ion concentration falls below normal, less H_2CO_3 is eliminated and its level in the blood rapidly increases. Thus, except under the most extreme circumstances, the lungs can keep the blood pH within reasonably normal limits simply by varying the elimination of carbonic acid. The extreme circumstances would be accumulation, to a marked degree, of other acids than H_2CO_3 or other bases than HCO_3^-.

Acid-Base Function of the Kidneys

Just as the lungs serve to excrete one important metabolic acid (H_2CO_3), so the kidneys excrete the other metabolic acids (H_2SO_4, H_3PO_4, organic acids). In the normal person these substances are formed in amounts of from 20 to 100 mEq/day depending upon the constituents of the diet. A diet high in phosphorus- and sulfur-containing proteins ("acid-ash" diet) may result in the formation of up to 200 mEq of acid/day. If any degree of ketosis were present much larger amounts of keto-acids might be formed. All of these acids ionize to a large degree: their hydrogen ions, therefore, are carried in the body in union with bases while their anions are paired with sodium or potassium.

Example

Let HX be the strong acid resulting from metabolism, ionizing into H^+ and X^-. Let B^- represent an ion of body base (HCO_3^-, HPO_4^{2-}, Hb^- or Pr^-) in combination with Na^+ or K^+. Then $H^+X^- + Na^+B^- \rightarrow HB$ (unionized) $+ Na^+X^-$. If this reaction continued day after day all body bases would soon be combined with hydrogen ion and a progressive acidosis would ensure. In addition the anions of the metabolic acids are largely waste products and must be eliminated.

The renal tubules contain an intricate mechanism whereby both H^+ and X^- may be eliminated in the urine and Na^+ and B^- may be restored to the body. Current concept (unproven) as to how this takes place is as follows: (1) a high local concentration of H_2CO_3 is made possible in the cells of the distal renal tubules because of an unusual concentration of the enzyme carbonic anhydrase. The H_2CO_3 ionizes to some extent into H^- and HCO_3^- ions. (2) Na^+X^- is present in the tubular urine, having been filtered at the glomerulus. (3) H^+ from the tubule cell is exchanged for Na^+ from the tubular urine. (4) H^+ X^- goes out in the urine and Na^+ HCO_3^- is transferred to the blood stream. (5) $Na^+HCO_3^-$ reacts with HB to yield Na^+ B^- and H_2CO_3. (6) H_2CO_3 is removed by respiration. Thus the original quantity of Na^+B^- is restored and H^+X^- is eliminated in the urine.

The distal renal tubular cell also has the power to form ammonia (NH_3) from the degradation of glutamine (and other amino acids) via the enzyme glutaminase. As H^+ concentration rises in the urine, NH_3 passes from the tubular cell into the urine, and joins with the H^+ to form NH_4^+ ($NH_3 + H^+ \rightarrow NH_4^+$). The NH_3 production keeps the hydrogen ion concentration of the urine from rising to high levels (pH rarely drops below 5.0).

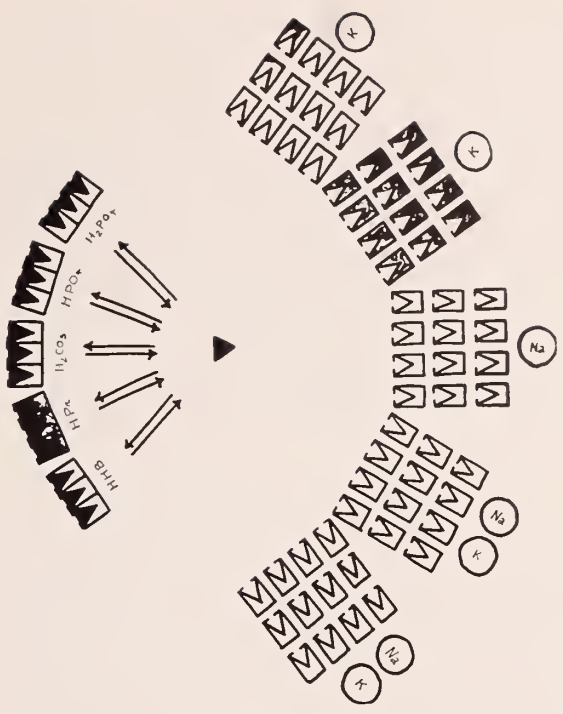


Figure 6

The total quantity of metabolic acid that is handled by the kidney each day is reflected by the total number of hydrogen ions that appear in the urine over and above the number in the glomerular filtrate. The hydrogen ions in combination with NH_3 we can measure as ammonium (NH_4) and the remainder are estimated by titrating the urine back to pH 7.4 (the pH of the glomerular filtrate).

These mechanisms are spoken of as the base-conserving function of the kidney, for obvious reasons. In the normal kidney approximately 1000 mEq. of hydrogen ion can be eliminated (and base manufactured) in 24 hours when the mechanisms are functioning maximally. Several days are required before NH_3 formation reaches its peak, presumably because of a build-up in glutaminase activity.

In addition to their function of disposing of metabolic acids the kidneys, under other circumstances, may have to dispose of ex-

cess base. The reabsorption of $NaHCO_3$ from glomerular filtrate is ordinarily nearly complete. However, if excess $NaHCO_3$ is added to the body (as by ingestion in the treatment of peptic ulcer), then tubular reabsorption becomes incomplete and as much as 1000 mEq. (or more) of $NaHCO_3$ may be eliminated in the urine per day.

The factors that determine tubular HCO_3^- reabsorption are only partially understood—the chief determinant appears to be the pH of the blood. Bicarbonate reabsorption is increased with a fall in blood pH and decreased with a rise in pH.

Clinical Upsets in Acid-Base Balance

In thinking about acid-base problems it is often helpful to construct the equilibrium reaction for H_2CO_3, H^+ and HCO_3^- (see fig. 4). This buffer system represents only 20-30 per cent of the total of such systems in the body but since all of them are in continuous dynamic equilibrium the state of acid-base balance can be accurately assessed by measuring the components of any one of the systems. None of the other buffer systems is susceptible to measurement since they exist in unionized non-reactive form as well as in their electrolyte state.

H^+ concentration can be measured directly with a pH meter. The sum of H_2CO_3 and HCO_3^- can be measured in a Van Slyke apparatus which traps and measures all the CO_2 released when the plasma is acidified (normal 27-29 mEq/L). HCO_3^- alone can be measured by a titration technique (normal 26-28 mEq/L).

I. Acidosis

Acidosis is defined as a drop in blood pH (excess of hydrogen ions). The amount of the change in pH is immediately important since it is presumably this disturbance that interferes with cellular function. The lower pH limit compatible with life is probably approximately 6.8. However, the extent of the loss or inactivation of body base is usually of more importance to us since it provides information as to the duration, likely future course and proper therapy of the upset. Causes of acidosis are as follows:

A. Addition of Excess Acid to the Body

Examples are (1) diabetic acidosis (large amounts of ketoacids from incomplete fat metabolism), (2) ammonium chloride overdose (metabolized to hydrochloric acid), (3) methyl alcohol poisoning (metabolized to formic acid), (4) late stages of salicylate poisoning (acids of undetermined type are formed in excess).

The carbonic acid equilibrium reaction will be displaced to the left by the addition of large amounts of hydrogen ion. HCO_3^- concentration will fall and H_2CO_3 will increase. Much of the added H^+ will be converted to H_2CO_3 by the shift in equilibrium but the final H^+ concentration will still be abnormally high. Ventilation will increase to dispose of H_2CO_3 (to the point of Kussmaul respirations), and the kidneys will excrete maximal amounts of H^+ and NH_4^+ with re-formation of increased amounts of HCO_3^-.

Measurements will disclose a low blood pH and a low HCO_3^- content. If there is a chemical test for the anion of the offending acid it will be positive (i.e., aceto-acetate in the blood and urine, the ferric chloride test in the urine for salicylate, an elevated blood chloride level with ammonium chloride and positive methyl alcohol test in the blood during the first 24 hours after ingestion).

Treatment will be directed first at stopping the original process if possible (i.e., insulin). Next, adequate renal function should be insured (blood, plasma or extracellular fluid replacement) since shock and decreased renal blood flow interfere with the kidney's very important role in correcting acidosis. Third: extra base should be provided as bicarbonate or lactate solution.

B. Loss of Body Base

This is nearly always the result of loss of large amounts of intestinal secretions (including bile and pancreatic juices) which contain relatively large amounts of HCO_3^-.

The removal of HCO_3^- displaces the carbonic acid equilibrium reaction to the right with a drop in H_2CO_3 and a rise in H^+ concentrations. Ventilation increases, further lowering H_2CO_3 to minimize the increase in H^+. Unfortunately the kidney's natural tendency to form increased HCO_3^- is seriously impaired because of the low extracellular volume and resultant drop in renal blood flow that always accompanies the loss of large volumes of gastrointestinal fluid.

Treatment is directed both at restoring extracellular volume (and therefore renal function) and at repairing the HCO_3^- deficit. These objectives can be accomplished simultaneously by giving sodium bicarbonate or sodium lactate solution (lactate is metabolized to bicarbonate).

C. Failure of the Lungs

The lungs fail in their acid-base function when serious emphysema or respiratory muscle failure interferes with the ventilation of CO_2. The partial pressure of CO_2 in the alveoli rises and the blood carbonic acid level increases. The carbonic acid equilibrium is shifted to the right, increasing HCO_3^- and H^+ levels. Much of the H^+ is taken up by the other body bases. The body has no further defense but to increase H^+ excretion in the urine, thereby forming more HCO_3^-. The rise in HCO_3^- level counteracts the increased ionization of H_2CO_3 and returns blood pH towards normal.

Treatment of this disturbance is directed at improving CO_2 ventilation via positive pressure devices or by eliminating bronchial infection or constriction. The danger of oxygen administration without concomitant measures to insure CO_2 ventilation is well known. If CO_2 ventilation decreases abruptly, blood H_2CO_3 may increase to poisonous levels with a marked drop in pH.

D. Failure of the Kidneys

There are two types of renal failure that may upset acid-base balance.

1. Tubular acidosis. The ability of the distal renal tubular cells to transfer H^+ and NH_4^+ into urine in exchange for Na^+ with which to re-form $NaHCO_3$ is impaired. The result is a chronic deficiency of HCO_3^- in the body, increased ionization of H_2CO_3 and acidosis. The urine contains less H^+ and NH_4^+ than normal. There is usually no glomerular disease and none of the features of uremia. Treatment is simply to provide a small supplement of sodium bicarbonate daily (50-100 m Eq) which approximates the amount manufactured each day by the tubules.

2. Inadequate glomerular filtration with azotemia (acute or chronic renal disease or prerenal azotemia).

The anions of the metabolic acids (PO_4^{3-}, SO_4^{2-}, and others that are unmeasured) must reach the tubular urine before the tubular cell transport mechanism that acidifies the urine and re-forms bicarbonate can operate. In uremia these anions are filtered in decreased amounts and accumulate in the body. To the extent that they accumulate, HCO_3^- re-formation lags behind and thus there is a deficiency in the body of as many mEq of HCO_3^- as there is an excess of metabolic acid anions. The deficiency of HCO_3^- results in increased H_2CO_3 ionization and acidosis. Ventilation is increased.

Treatment is directed along three lines: (a) Every effort is made to improve glomerular filtration to a maximum by assuring normal extracellular fluid volume and maximum cardiac efficiency. (b) Protein metabolism is decreased to a minimum to cut down the formation of metabolic acids. (c) The addition of sodium bicarbonate or sodium lactate will decrease the acidosis but may increase extracellular fluid volume to a dangerous level.

II. Alkalosis

Alkalosis is defined as a rise in blood pH (deficiency of hydrogen ions). Again, although the actual pH of the blood is important, it is essential that we know the level of HCO_3^- for proper interpretation and treatment of the disorder. Causes of alkalosis are as follows:

A. The Addition of Excess Base to the Body

This is the simplest but not the most common cause. Ingestion of very large amounts of $NaHCO_3$ may exceed the kidney's capacity for excretion, particularly if there is a disease such as heart failure with a tendency to sodium retention. HCO_3^- levels rise, shifting the carbonic acid equilibrium to the left and decreasing H^+ concentration. Ventilation is decreased and H_2CO_3 levels rise further above normal. The treatment is cessation of $NaHCO_3$ ingestion.

B. Loss of Stomach Acid

Continuous gastric suctioning or obstruction of the pylorus from peptic ulcer may result in losses of large amounts of HCl. Removal of H^+ from the body shifts the H_2CO_3 equilibrium reaction to the right with re-

sultant increase in HCO_3^- and drop in H_2CO_3. Ventilation decreases and H_2CO_3 is retained. In the earlier phases of this disorder H secretion and HCO_3^- formation by the kidney cease and HCO_3^- is actually lost in the urine through decreased tubular reabsorption. Alkalosis does not progress under these conditions. However, when loss of extracellular fluid volume and other electrolytes becomes serious, as it inevitably does when all of the gastric juice is lost, renal circulation and renal function rapidly deterioriate. The urine becomes acid (possibly associated with K^+ deficiency, see below) and HCO_3^- elimination ceases. Systemic alkalosis rapidly progresses under these conditions.

The treatment is directed first at restoring extracellular fluid volume so that renal function can be returned to normal. This can be done only with blood, plasma, or sodium-containing solutions. Logically one would use NaCl rather than $NaHCO_3$ or Na lactate. This sort of therapy will often cure the alkalosis since restoration of kidney function enables excretion of large amounts of bicarbonate.

Additional therapy with hydrochloric acid parenterally will relieve the alkalosis rapidly by shifting the equilibrium reaction back towards H_2CO_3. In place of HCl we customarily use NH_4Cl solution which is metabolized in the liver to urea and HCl. This type of therapy, though it will relieve the acidosis, will not improve the accompanying dehydration and imparied renal function.

Potassium deficiency regularly accompanies this syndrome (due to loss in gastric contents) and since there is much evidence to indicate that it is responsible for part of the poor renal function (paradoxically acid urine) it should be administered early in treatment.

C. Hyperventilation

Excessive ventilation may result from emotional upset, head injury, a mechanical respirator or high altitudes. The alveolar partial pressure of CO_2 in decreased and the blood H_2CO_3 level drops. The equilibrium reaction is shifted to the left with drop in H^+ and HCO_3^- levels. H^+ drop, of course, is minimized by the release of H from the other bases. Tetany may result from the H^+ drop. Renal tubular HCO_3^- reabsorption is decreased and HCO_3^- appears in the urine, further decreasing blood HCO_3^- levels which has the effect of stabilizing the fall in H^+.

Treatment depends upon the cause. Tetany can be immediately relieved by CO_2 inhalation or rebreathing in a closed system in which the CO_2 accumulates. Opiates are sometimes helpful in slowing down the rapid respirations.

D. Specific Deficiency of Potassium

In hyperadrenalcorticism or in conditions where K^+ is the only electrolyte lost (usually gastrointestinal problems) a peculiar type of alkalosis sometimes results. The urine is often paradoxically acid and therapy with NH_4Cl does not produce the expected improvement. On the other hand K^+ therapy results in a disappearance of the alkalosis. It is postulated by some that there is a disturbance in the normal intra-extracellular relationships such that H^+ moves intracellularly causing an alkalosis in the extracellular fluid and an acidosis in the intracellular fluid. Supposedly an intracellular K^+ deficiency is the genesis of this disturbance.

This is undoubtedly an oversimplification of a complicated relationship but serves to point out the importance of K^+ balance in acid-base problems.

Conclusion

In the analysis of an acid-base problem we want to know (a) the concentration of hydrogen ion in the blood, and (b) the amount of body base, which we infer from the bicarbonate concentration. We are concerned with the function of the lung and the kidneys since serious acid-base disturbances almost never occur unless these organs are temporarily or permanently deranged. Our treatment is first directed at restoring pulmonary or renal function and next at adding hydrogen ion (in the form of ammonium chloride) or base (in the form of sodium lactate or bicarbonate) if they are needed.

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A Survey and Report of An Unrecognized Case:

APPENDICITIS *and* PERITONITIS *During* PREGNANCY

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Appendicitis during pregnancy merits considerable concern because pregnancy, or its commoner complications, tend to obsure prompt diagnosis and because physicians have a pronounced unwillingness to perform surgical operations on pregnant women. Should abortion or miscarriage result after an operation which could have been avoided, or which was done in good conscience for an erroneous diagnosis, the physician may reproach himself unduly. However, the results of delayed surgery can be tragic for both mother and fetus.

The most radical attitude noted in the literature is the advice that any woman who has ever had an attack of appendicitis should undergo an interval appendectomy before she is "permitted" to become pregnant.

Statistics relating to appendicitis during pregnancy vary widely. Laforet[3] quotes an incidence of 1.02 per cent in a survey of the world literature since 1911. The lowest incidence, 0.03 per cent, is quoted by Smith and Bartlett[7]. Most authors call attention to the fact that upward displacement of the cecum by the enlarging uterus and loss of abdominal muscle tone during pregnancy tend to distort and obscure the usual signs by which appendicitis is recognized. Incidence of rigidity of abdominal muscles varies from 10 per cent[4] to 30 per cent[5].

Incidence of gangrene and perforation is infrequently described in the literature, but Smith and Kendall[6, 7] report 61 acute surgical emergencies of the abdomen during pregnancy, 24 (39 per cent) of which were appendicitis. Of these, 4 (16.6 per cent) of the appendices were perforated. Three (75 per cent) of the patients with perforating appendicitis died. Laforet[3] quotes 30 per cent maternal mortality when peritonitis was present.

In the Memorial Hospital at Lawton, in which 90-95 per cent of the obstetric service consists of private patients, 2,884 patients were admitted for delivery on the Obstetric Service in the first four and one-half years of operation. During this time, five appendectomies were done during pregnancy. Since four of the diagnoses were verified pathologically, the corrected incidence is 0.138 per cent. (These statistics may be somewhat inconclusive because a certain proportion of a large number of military dependents residing here get part of their prenatal care from local physicians, then, after the sixteenth week, or in an emergency, become eligible for care at a nearby Army Hospital and transfer there.) Only one of our cases was perforated and obscured diagnosis makes it worth adding to the literature for statistical value.

Case Report

M.B., 25 year old Negro para iv, gravida v, had been seen during the latter half of pregnancy. She could not estimate when her last menses had occurred. Her physician, by observing the rate of uterine enlargement, had estimated the pregnancy to be at term about the end of March, 1956. In January, 1956. she was treated with sulfisoxazole by an urologist for a resistant urinary tract infection. When she consulted her usual physician in February she complained of generalized abdominal pain, vomiting, dysuria and urinary frequency. A catherized specimen contained innumerable pus cells and 10-20 red blood cells per high-power

field. On February 5, 1956, she was hospitalized because of persistent cystitis and for institution of fluid replacement therepy because of dehydration. On February 8, 1956, she developed definite labor contractions. Her temperature was 99.8 (F), RBC 4.43, Hgb 12.75 gm, WBC 16300 with 79 per cent segmented polymorphonuclears and 4 per cent non-segmented. BP was 110/60. Because labor failed to progress, a flat roentgenogram of the abdomen was obtained. It revealed unsuspected twins, the presenting one lying transversely. Auscultation by the attendant failed to locate fetal heart tones and consultation was requested. The consultant concurred in the diagnosis of twin pregnancy with abnormal presentation; premature nonprogressive labor; and persistent infection of the urinary tract. The fetal heart tones of the presenting twin were located and estimated to be about 180 beats a minute. No heart tones of the upper twin were located. The cervix was rigid and not dilated after 14 hours of labor. Toxicity from the infected urinary tract was thought to account for premature labor and fetal anoxia. Caesarian delivery was deemed to be safer for the already anoxic babies than manipulative delivery from below.

With the patient under nitrous oxide-cyclopropane anesthesia a low cervical cesarean section was done. The parietal peritoneum and anterior surface of the uterus had no unusual appearance. The bowel was not inspected when packed away from the sides of the uterus. The bladder flap elevated easily. Small, viable twins, male and female, were delivered through a longitudinal incision in the lower uterine segment. During closure of the uterus, the odor of colon bacillus was transiently perceived twice. Brief consideration was given to the possibility of peritonitis due to a perforated viscus, but the furtive passage of flatus by an assistant was deemed more probably the source. After replacement of the bladder flap, the packs were removed and a literal flood of pus observed on the right side revealed the source of the odor. Suction was instituted and the pus was found to extend as high as the subphrenic space. No activity of the omentum or reaction of immunity in the peritoneum was noted. A completely disintegrated appendix was found attached by a shred to the cecum and extending medially behind the uterus. It was ligated and removed. Penrose drains were inserted through a stab wound in the right flank to the parocolic gutter, the pelvis and the area medial to the cecum, and the laparotomy incision closed. The patient was given 500 cc. whole blood during the operation and another 500 cc. 10 hours later. Shock prophylaxis, duodenal suction, antibiotics and electrolyte maintenance were used postoperatively. One twin, weighing 3 pounds 10 ounces, died on the second day. The other, weighing 3 pounds 1 ounce, died on the fifth day. The mother's convalescence was stormy and continued to be complicated by persistent pyuria. Bateriologic study for antibiotic sensitivity yielded a negative culture.

The drains were removed on the third and fourth postoperative days. An anticipated fecal fistula failed to develop and the patient's clinical course became more routine until the fourteenth day when a subfascial abscess in the lower portion of the incision was noted. It drained spontaneously before surgical drainage could be scheduled, and she became afebrile. She was discharged March 3, 1956, the twenty-third postoperative day.

Comment

This case, like that of Hoffman and Suzuki[2], was completely unrecognized and, like that of Ziegler and Lawrence[9], was discovered in the course of doing a low cervical caesarian section. Like the latter authors, I do not advocate the handling of this case as the method of choice; I report the case only for its unusual features and statistical value.

Summary

A brief review of recent literature surveying the incidence of appendicitis during pregnancy has been presented. A case of unrecognized perforating appendicitis with general peritonitis, obscured by persistent infection of the urinary tract and discovered during a caesarian section for fetal emergency, has been presented for its statistical value.

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The USE *of* CONTACT LENSES

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Corneal pathology is responsible for approximately 14 per cent of blindness in the United States. In our total blind population of some 400,000 this means at least 56,000 are totally blind from corneal pathology and many more with serious visual impairment. Blindness is a problem which concerns us all, not only from its humanitarian aspect but as a major economic problem. Blindness has no significant effect upon mortality, and blind people live their full span of years, often totally or at least partially dependent on others. Improved methods of dealing with corneal abnormalities are thus not only of importance to the opthalmologist, but to all of us by enabling us to give our patients sound advice which has not been culled from the popular magazines.

Many of these patients have congenital defects such as keratoconus and associated conditions which can be successfully treated but for which no means of rehabilitation were available until the past few years. Keratoconus is a developmental anomaly with a definite hereditary tendency involving a weakness of the corneal tissue with stretching in the axial part producing a distortion which is not correctable with conventional glasses. It is usually bilateral, becomes manifest in early adolescence and progresses to scarring with loss of useful vision. Attempts have been made to correct the optical defect with contact lenses for the past 125 years but it is only within the past few years that practical lenses have become available. Early lenses were successful in rare cases only. With the advent of local anesthesia more accurate fitting became possible.

In 1936, when the Zeiss lenses made in Germany were no longer available, Mr. Obrig and others in New York initiated the manufacture of contact lenses in this country. Lenses were made quite accurately from molds obtained from plastic impressions of the cornea and refractive corrections were incorporated in the lenses. However, even these lenses were seldom tolerated for more than a few hours since it was necessary to use a solution in the lenses which was held in by the scleral portion of the lens forming a closed system. This interfered with the normal respiratory function of the cornea and so disturbed the metabolism that corneal edema quickly developed with blurred vision, painful, red and watery eyes. In 1948, Dr. Touhy of Los Angeles developed a fluidless lens which covered only the corneal portion of the eye. This corneal lens allows a circulation of lacrimal fluid behind the lens and produces very little disturbance in metabolism other than the initial symptoms produced by the presence of a foreign body in the eye. Although it is not recommended, patients have kept these lenses in their eyes continuously over a period of weeks with no discomfort or evidence of ocular injury. At first it was thought that this corneal lens could not be used for the correction of keratoconus because of its small size so fluidless lenses of a corneo-scleral type were developed with perforations or other devices which allowed circulation behind the lens.

In my experience the corneal lens has satisfactorily corrected every case of keratoconus that could be corrected with the corneoscleral lens slides. Those cases which were too far advanced to be corrected with any type of contact lens must be treated by partial penetrating keratoplasty. In 21 cases of keratoconus, seen in the past five years, only four have required surgical treatment and these obtained perfect results, confirming the experience of other surgeons that corneal transplantation in keratoconus has a good prognosis.

In addition to their use in keratoconus, contact lenses are indispensable in many other types of corneal pathology. Corneal injures frequently leave scars which prevent useful vision. In some of these patients the contact lens forms a new corneal surface which relieves the distortion sufficiently to allow useful vision. One such patient in our series was completely disabled with bilateral chemical burns that produced complete blindness in one eye and reduced vision in the other eye to perception of hand movements. By some miracle of optics he is able to get 20/20 vision with one eye with a contact lens, has useful reading vision and is once more gainfully employed. Another important use for contact lenses is in the patient with unilateral aphakia. As you know, when a lens has been removed from one eye while the other eye retains good vision, binocular vision is impossible because of the disparity in the size of the images formed by the two eyes. The corneal lens allows binocular vision in many of these patients. Many patients who have had cataracts removed from both eyes prefer the contact lens because it enables them to dispense with a pair of heavy glasses and allows them a much wider field of vision.

In addition to their function in restoring vision contact lenses are desired by many people so they will not have to wear spectacles. The use of contact lenses in correction of high refractive errors is a more personal question and is not routinely recommended by the physician since their use is primarily for cosmetic reasons or for functional reasons by athletes, actors, models and others who prefer to dispense with glasses for certain purposes but must have adequate vision. Of this group, our experience agreed substantially with previous reports that not more than 25 to 30 per cent could wear lenses satisfactorialy. Any contact lens is an ocular foreign body and many factors enter into the ability to develop a tolerance to this foreign body. Even strong motivation will not overcome extreme hypersensitivities, allergies, etc. However refinements in manufacturing and fitting technics in the past year have increased the percentage of successful use to at least 75 per cent. What appeals to me as sensible management of these patients is the statement which a neighboring physician makes to his patients, "If you want to gamble $200.00 on the possibility of your being able to wear these lenses, your chances of doing so are about one in three." The fitting can then proceed with no false illusions.

This is the largest group of patients who want contact lenses and it is in this field that there has been much commercial exploitation with misleading advertising. While it is true that newer technical developments are increasing the number of successes in this group these lenses will never replace conventional glasses for many reasons. Of the many factors which prevent satisfactory use of contact lenses one of the most frequent is my experience has been the presence of lenticular astigmatism, which was present in amounts of one diopter over in nearly 10 per cent of a series of 237 patients. This is an astigmatic refractive error which is not manifest until the contact lens is in place and is not correctable by the lens. Other contra-indications are, small refractive errors, early presbyopes, patients with ocular allergies or infections, degenerated (phthisical) eyes and those with hypersensitive or fragile tissues.

For patients with corneal pathology who cannot be benefitted with corneal lenses, keratoplasty or corneal transplant is sometimes helpful. This operation involves replacing diseased or opaque corneal tissue with clear corneal tissue from a donor eye. Recent developments in technic have placed this operation in the realm of any competent eye surgeon, and it is rapidly becoming more widely used. The principal difficulty with this type of surgery is obtaining an adequate

supply of donor material. Keratoplasties are of two general types, penetrating, involving the full thickness of the cornea, or lamellar, involving only the superficial layers. Penetrating grafts are always partial since it has been impossible to graft the entire cornea and maintain clarity of the graft. Lamellar grafts may be partial or involve the entire cornea but the visual results are not as good as with penetrating grafts. They are principally used as therapeutic procedures in intractable corneal disease or in extensive corneal pathology where penetrating grafts are contra-indicated.

Corneal transplantation has been attempted for more than 150 years. Successful cases were reported 65 years ago but in only rare instances. The usual procedure is to remove a disc of opaque corneal tissue with a trephine and suture a similar disc of clear cornea from a donor eye into its place with direct sutures. Unfortunately, surgery is not indicated in many cases of corneal opacities and the prognosis varies greatly with each eye depending on the pathology present. The most favorable cases are those with keratoconus or central scars surrounded by clear cornea, such as a result from trauma, disciform keratitis, or familial corneal degenerations. Some successful results are obtained in corneal degenerations. Some successful results are obtained in corneal dystrophies, but improvement is seldom noted with extensive calcareous scars particularly if much vascularization is present. The use of Beta radiation both pre- and post-operatively in controlling vaccularization has improved the prognosis in many patients. Keratoplasty is definitely contra-indicated in the presence of glaucoma or active ocular inflammation of any kind.

As mentioned, the principal problem encountered in corneal surgery is an adequate supply of donor material. In the larger centers this problem has been met by the establishment of so-called Eye Banks. Actually they are not banks in the sense of storing material, since eyes should be used within 48 hours after removal, so the Eye Banks function chiefly as distribution centers. Most eyes are obtained from donors who have willed their eyes for this purpose before death. They must be removed under conditions of surgical asepsis within five hours after death, and kept in sterile containers in the refrigerator until used. In this state, when patients who need corneas are not available, the eyes are sent immediately to the Eye Banks in Chicago or New York so that none are wasted. After use these eyes are sectioned and used in research studies. Many valuable contributions to the literature have resulted from these studies. Persons wishing to donate their eyes after death often request information from their family physician as to the proper procedure. Forms can be obtained on request through the Oklahoma State Medical Association Offices, or the Secretary of the Oklahoma City Academy of Ophthalmology and Otolaryngology. It is estimated that a least ten thousand Americans could probably be made to see again through the corneal graft operation, but the only way these people will be given the opportunity to see is through the generosity of the many donors who bequeath their eyes for this purpose.

To summarize—many kinds of corneal pathology which formerly doomed the patient to permanent blindness are amenable to treatment by modern techniques with contact lenses or keratoplasty. In addition to their function in restoring vision, contact lenses may be worn by many people for cosmetic reasons or for specific functions.

Corneal transplant surgery will become available to many patients only when donor eyes become available and at present the need is far greater than the supply.

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Special Article

An Analysis of Legal Problems Resulting From Practice of ARTIFICAL INSEMINATION *in Oklahoma*

CHARLES E. MALSON, LL. B.

THE AUTHOR

Charles E. Malson, LL.B., is a graduate of the University of Oklahoma School of Law and a practicing Oklahoma City attorney.

Many articles on the problems created by artificial insemination have been written by persons in the fields of religion, social sciences, medicine and law. Opinions are as varied as the authors who have considered the subject, therefore, this discussion will purposely avoid touching on the right or wrong of the practice in a moral or social sense. The purpose of this discussion is to enlighten the physicians of the State of Oklahoma as to the legal consequences flowing from this practice.

There are two commonly used terms in reference to the practice of artificial insemination. First is artificial insemination homologous, abbreviated as AIH, which is used in the case of fertile couples where there is penile or vaginal malformation. There appears to be no serious legal consequences from this practice as the husband is the lineal father of any off-spring ensuing. The physician assisting the couple would merely be bound by the same degree of professional skill and care which is required in all medical procedure.

The practice which engenders serious legal consequences is that of heterologous insemination, commonly abbreviated as AID (artificial insemination donor), and this will be the subject of our discussion.

The law relating to AID is more astonishing by its scarcity than for any other reason. There have been very few cases dealing directly with the subject and no statutory law whatever in so far as it relates to humans. It might be interesting to note, however, that the Oklahoma Legislature has passed statutes designating Oklahoma A & M College the official Oklahoma agency to "sponsor, establish, develop and execute a program of artificial insemination for the benefit of the *Livestock Industry* of the State." It would appear that however noble this project may be, *homo sapiens* should be entitled to equal time and consideration as the bovine genus.

It must here be noted that what little law there is on this subject has no controlling effect upon the Supreme Court of this State. A New York court held, on the limited point of rights of visitation by a husband in a divorce case, that he had such rights and that the child was legitimate. The Court expressly refused to pass upon the propriety of AID or the property consequences thereof. A Canadian Court in a 1921 divorce case, in a gratuitous portion of the opinion, declared AID to be adulterous. An inferior court in Illinois stated that AID, with or without consent of the husband, is contrary to public policy and good morals and constituted adultery on the part of the mother and that a child so conceived is illegitimate. Further, the court added that the husband had no right or interest in the child.

Thus, it may be seen that the law is scarce and the holdings conflicting. The difficulty of course arises from the fact AID was unknown to the common law and that the old established doctrines can not possibly be applied to this new problem without many conflicts. Therefore in this analysis of the problem, we shall merely take the Oklahoma law

as it now is and look at the legal consequences that may arise therefrom.

The two problems most likely to cause serious litigation in this field are those of legitimacy of the child and the rights of inheritance by the child from the husband of its mother. These questions are closely related yet resolving one does not answer the other.

Our courts are loath to declare a child illegitimate and the law imposes a very strong presumption that a child born in wedlock is legitimate. Yet the fact remains that children are born in wedlock who are not the issue of the husband and are, therefore, legally illegitimate. By the same token a child born of AID may well be deemed illegitimate by the courts. This is especially true if the express consent of the husband is not given for this act.

Assuming. however, that a child born of AID is legitimate in the eyes of the law and that full consent of both parents is given, we then encounter the most serious legal problem flowing from this practice. It is that of inheritance by the child from the husband.

The uninformed "parents" feeling that their new offspring stands in the place legally of a natural born child probably take no legal action to adopt the child nor provide for it by Will. They assume that it will "inherit" their property by intestate succession. This is not so.

Our descent and distribution staute is complex and long. It provides in substance that when a person dies without a Will, the estate is distributed proportionately among the surviving spouse and issue. If there be no spouse nor issue, then the estate goes to the decedent's lineal descendants.

The critical word used in the statute is issue; which has been defined by the Oklahoma Supreme Court as it relates to this statute as follows: "issue means descendants, *lineal* descendents, offspring and includes grand-children."

Thus, it may be seen that a child born of AID definitely does not meet the statutory requirements for inheritance. The obvious impact of this being that disregarding the question of "legitimacy" as such, one of these children would in all likelihood not inherit property from a husband who is not the lineal father of the child. That is, if he dies intestate, collateral heirs related in some degree of consanguinity would be able to defeat the claims of the child by AID.

From this analysis it may be seen that even should we label a child born of AID "legitimate" so as to remove the social stigmas attached to bastards, this in and of itself has no bearing whatever upon this child's rights of inheritance. The fact remains that he probably cannot inherit from the husband of his mother.

Therefore, from a legal viewpoint, any persons desiring to have a child by AID, should, in order to protect the child's right of inheritance, provide immediately for the child by Will. Further, as Wills are revocable, may be lost and are subject to attack, the husband should also legally and formally adopt the child. If these precautions are taken, the child will be protected in Oklahoma. If they are not, the consequences may be very serious for the child.

Another question which has caused much consternation among the medical and legal professions in light of some of the decisions, is that of adultery. A forceful argument can be made that AID, without express consent of the husband, constitutes adultery. If this be true, then under our statutes, the physician performing this service could be guilty of the crime as a principal, defined in our statute as follows:

> "All persons concerned in the commission of a felony, whether they directly commit the act constituting the offense or aid in abetting its commission, although not present, must be indicted, tried and punished as principals."

The theory being that if a child is born during wedlock and the husband can by clear and convincing evidence overcome the presumption of legitimacy imposed by law, then the child being illegitimate, must have been conceived by an adulterous act.

The syllogism as stated, is perfect, but in this writer's opinion, the conclusion of adultery cannot fit the statutory definition in Oklahoma.

Our statute reads: "adultery is the unlawful, voluntary sexual intercourse of a married person with one of the opposite sex."

Thus, it may be seen, that to perpetrate the crime of adultery in Oklahoma, there must be an act of voluntary sexual inter-

course. As AID is unknown to the common law and also to statutory law, we must therefore indulge in a bit of sematology. Black's Law Dictionary, 3rd Edition, defines sexual intercourse as "carnal copulation of male and female implying actual penetration of the organs of the later." We are thus lead to the definition of carnal, which Black defines as "of the body, relating to the body; fleshy; sexual." Webster then defines copulation as: ". . . the embrace of the sexes in the act of generation."

Thus, it may seen that sexual intercourse basically implies the bodily or fleshy *embrace* of the sexes in the act of generation.

It would appear that an elaborate analysis of the cases and policy concerning adultery is unnecessary viz, AID is not adultery in Oklahoma.

What our courts will do with this problem, if and when it is presented to them, would of necessity be conjectural; however, reason would indicate that the criminal aspect of adultery resulting from AID can be discounted as to the physician, donor and wife.

The problems outlined above represent the most obvious legal consequences flowing from the practice of AID. The liability of a physician performing this function remains, however, an unknown factor. It is possible that he could also be charged with assault and battery or rape and be susceptible to civil suits in the nature of malpractice cases for injury in childbirth, etc. However, the physician can in all probability protect himself by obtaining written consent of both husband and wife and also of the donor. He should be sure that there are kept as confidential records, accessible only to him. Further, the donor should remain anonymous and so agree in writing.

By being cautious and maintaining that degree of medical skill and care required to prevent malpractice suits, a physician probably has less to fear from personal legal liability than he does from the possible ill feeling of a family who although perfectly happy with their child and the medical services rendered, become entangled in the morass of archaic law as previously set forth. Therefore, a physician certainly should acquaint himself with these legal problems and his patients should also be made aware of them.

By way of conclusion, this writer would like to point out that the only sure solution to the problem is for the public, medical and legal professions to decide if AID is desirable and if so . . . to insist on legislation which will remove all doubt in this most controversial and confusing subject.

New IRS Regulations Gives Tax Advantage for Physician

The U.S. Internal Revenue Service recently issued a regulation which is important to physicians.

Efforts over a long period of time by the A.M.A. Law Department to get the Internal Revenue Service to issue a regulation permitting physicians to deduct their expenditures in taking postgraduate "refresher" courses have finally paid off.

The regulation, which went into effect on August 9, provides that expenditures for education are deductible if they are for a "refresher" or similar type of course taken to maintain the skills directly and immediately required by the physician in his employment or business. An educational course to be covered should be designed for established medical practitioners to help them keep abreast of current developments in the profession; it should be of short duration; it should not be taken on a continuing basis and should not carry academic credit. Education designed to prepare the practitioner to enter a specialty will not be acceptable.

When a physician travels away from home primarily to obtain "refresher" education, his expenditures for travel, meals and lodging while away from home are deductible. However, expenses for personal activities such as sightseeing, social visiting or entertaining, or other recreation will *NOT* be allowed.

A RESEARCH MILESTONE

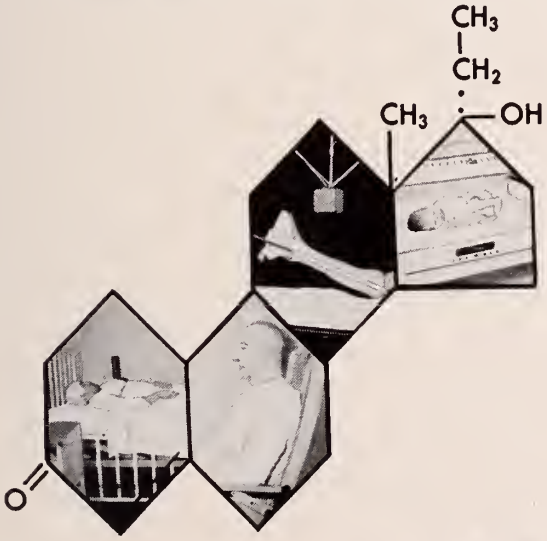
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Association Activities



PRESIDENT'S LETTER

Well the "hootin and hollerin" of our own political campaign is about over and when one scans the headlines from over the world, it appears that there is the same basic falseness in every political system, today. For instance; take a belief, a deep and delightful belief like the importance of the human being, and the importance of giving him enough freedom and helping him find enough responsibility to keep growing as a human being (the belief all religions are based on) and then separate that tenet from life and values, from integrity and honor, and tie it up with common things and with the way people are making their money at the moment; and then let a gang of avaricious men, armed with an atom, begin to manipulate all this together to get power for themselves—well, you've got a hell of a mess. That is what is happening across the face of the world today. Every political system uses men and their real needs and warm beliefs to build party power.

Don't get me wrong, I believe in government, but it should be a government of human beings by human beings for human needs and aspirations. The word DEMOCRACY is still descriptive enough for me. But the people have got to put the politician in his place. He needs to be told he has no divine rights (there is nothing divine about his political party either). Let's face it, party loyalty is a verbal switch-blade used by the little and big bosses to force us to accept a questionable situation our intelligence and conscience should reject. The politicians are of the opinion that if they are caught breaking a moral or legal law, the only punishment they need fear is a moving of their office, either up or down stairs or across the street, and—business as usual. Public servants—they call themselves (thank God there are a few). They run like the wind for office, either for monetary gains, political prestige or to inflate their ego. If they are caught (they can be) defrauding the people of this country, let them have a fair and impartial trial, but (the legal profession take note) let the trial also be fair and impartial for John Q. Public, he pays the tariff. I have a deep respect for the true statesman, but you could dump all the politicians on a boat and sink it and nothing would happen except folks might have a long deserved night's sleep.

But how can you get the voters of this country to believe they are important and that they must assist in the running of this country. It's a king size job, alright, and the most important one of our day. We must seriously consider the qualities of the candidates. Do they have honesty and integrity? Are they basically and fundamentally sound, solid Americans? Forget other so-called qualifications and party ties. The M.D.'s of this state who are qualified for political offices are derelict in their duties if these attributes are allowed to wither on the vine. Messes are never cleaned up by the tenants, the real owners of this country must do the job. "Busy," you say; if we don't do it in our individual way, then some smart politician is going to convince us it is easier, "just to leave it to him" to settle the world's problems.

Tom McClure M.D.

President



"Home Remedy" or Professional Service?

Few families today rely on home remedies when illness strikes. And that's as it should be . . . the treatment of the sick and injured should be left to the men and women who have dedicated their lives to the medical profession and the scientific treatment of the sick and injured.

However, when it comes to another important field of service to mankind—estate planning—it is unfortunate that many doctors still rely on the "home remedy." Instead of consulting those who are dedicated to estate planning, they leave the handling of their estates to well-meaning but untrained and inexperienced relatives or friends, or simply use the "home remedy" themselves.

According to an article in the American Medical Association letter of October 18, 1955:

"Only one doctor in eight survives his wife."

"One out of three physicians left no will."

"Expenses of settlement of the estates studied ranged from a minimum of 13% to as much as one-third of the total estate."

Don't delay another day, Doctor! For the sake of your family's welfare, let our Trust Department discuss with you immediately the urgent matter of the transfer of your estate in the event of your death. Call REgent 6-1531 now and ask for our Mr. Scott. He'll be happy to call on you at your convenience.



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Tulsa County Medical Society To Hold Founders Day Clinic

Oklahoma physicians are invited to attend the Fourth Annual Founders Day Clinic of the Tulsa County Medical Society in Tulsa, October 31-November 1, 1956. Four nationally known medical personalities have been scheduled as visiting distinguished guest speakers.

Robert M. Shepard, Jr., M.D., Chairman, has announced the following will appear.

Otto Saphir, M.D., Chairman of the Department of Pathology, Michael Reese Hospital, and Professor of Pathology, University of Illinois School of Medicine, Chicago, Illinois.

Walton R. Akenhead, M.D. Professor and Chairman of the Department of Medicine, Louisiana State University School of Medicine, New Orleans, Louisiana.

A. Buford Word, M.D., Associate Professor of Obstetrics and Gynecology, University of Alabama School of Medicine, Birmingham, Alabama.

Lawrence H. Strug, M.D., Professor of Surgery, Louisiana State University School of Medicine, New Orleans, Louisiana.

The annual event honoring the founders of the Society is jointly sponsored by the Tulsa Academy of General Practice, the Oklahoma Division of the American Cancer Society, and the Tulsa County Heart Association. It has been approved for formal postgraduate credit in Category One by the American Academy of General Practice.

The Clinic will open Wednesday evening, October 31, with a dinner at the Tulsa Club. Doctor Word will discuss "Congenital Absence of the Vagina." This will be the W. Albert Cook lecture in honor of Doctor W. Albert Cook, first President of the Society in 1907. Doctor Cook will be a special guest.

On Thursday November 1, a day long session will be held at the Blue Cross-Blue Shield Auditorium at 1215 South Boulder.

The program is as follows:

10:00 a.m.—Registration and Coffee
10:30 a.m.—*Cardiac Emergencies*, Walton R. Akenhead, M.D.
11:15 a.m.—*Surgical Management of Benign Lesions of the Colon and Rectum*, Lawrence H. Strug, M.D.
12:00 Noon—Luncheon
1:00 p.m.—Clinical Pathological Conference, Otto Saphir, M.D., and Walton R. Akenhead, M.D.
2:15 p.m.—*Abnormal Utering Bleeding*, A. Buford Word, M.D.
3:00 p.m.—Coffee and Refreshments
3:15 p.m.—*Esophageal Hiatus Hernia*, Lawrence H. Strug, M.D.
4:00 p.m.—*Spread of Human Cancer*," Otto Saphir, M.D.
4:45 p.m.—Adjournment

There is no charge for the Clinic, and all medical doctors are urged to attend. Dinner will be $5.00, including social hour, and luncheon will be $1.50. Tickets may be ordered from the Tulsa County Medical Society, B-9 Medical Arts Building, Tulsa, Oklahoma. Hotel reservations are available upon request of the Society.

Grand Rounds Telecast Offered Oklahoma Physicians

An invitation has been extended to Oklahoma physicians by the Upjohn Company to attend a closed circuit, live telecast entitled "The Borderlines of Cancer; Problems in the Management of Dubious Lesions," which is 90 minutes in length.

The telecast will be presented Wednesday, October 17, in the Venetian Room of the Skirvin Hotel, Oklahoma City, at 7:00 p.m. It will emanate from Tufts University School of Medicine and the New England Medical Center in Boston.

One of the outstanding features of this program is the good geographic representation of the panel. The panelists and their affiliations are:

Lauren V. Ackerman, M.D., Washington University School of Medicine, St. Louis, Mo.

Edwin B. Astwood, M.D., Tufts University School of Medicine, and the New England Center Hospital, Boston, Mass.

Henry L. Bockus, M.D., University of Pennsylvania School of Medicine, Philadelphia, Pa.

George Crile, Jr., M.D., Cleveland Clinic, Cleveland, Ohio.

Leo H. Garland, M.D., Stanford University School of Medicine, San Francisco, Calif.

Phillip J. Hodes, M.D., Professor of Radiology, School of Medicine, University of Pennsylvania.

Alton Ochsner, M.D., Tulane University School of Medicine, New Orleans, La.

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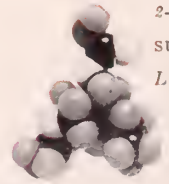
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New Federal Loans To Health Facilities

The newest federal loan program in the health field now appears to be underway: Small Business Administration loans to proprietory hospitals, nursing homes and medical and dental clinics. Unlike the Hill-Burton Act and most other federal programs, this is not directed to non-profit organizations.

The following is a list of definitions for eligible facilities:

Hospitals are those facilities which are licensed as hospitals providing in-patient medical or surgical care of the sick or injured, including obstetrics, and which are privately owned and operated for profit.

Nursing homes are those proprietary facilities for the accommodation of convalescents or other persons who are not acutely ill and not in need of hospital care but who may require nursing care and related medical services.

Medical and dental laboratories are those proprietary units that provide services to physicians, dentists, hospitals and similar health facilities.

Under SBA regulations, any establishment seeking a loan must qualify as a small business operation. In the case of this new field, hospitals and nursing homes will be considered small business when capacity does not exceed 50 beds at time of application. All laboratories shall be considered small unless operated in connection with a proprietary hospital of more than 50 beds.

SBA makes two types of loans: direct and participating, the latter jointly with a bank. Other criteria include: (1) the applicant must show that the needed financing is not otherwise available on reasonable terms from another credit source, (2) applicant must show that the loan can be repaid out of earnings, (3) owners and operators of a facility must be experienced in their field and with enough professional training to operate in accordance with accepted standards, (4) when licensing is required by state, county or local agency, the facility must have a license in good standing or show that a license will be issued, and (5) applicant for direct loan must enclose letter from the private lender stating it is unable to make the loan.

Applications and information are available at SBA regional offices in Boston, New York, Philadelphia, Richmond, Atlanta, Cleveland, Chicago, Minneapolis, Kansas City, Dallas, Denver, San Francisco, Los Angeles, Seattle and Detroit.

Association Attends Department Of Defense Meeting in Denver

At a meeting in Denver, Colorado on August 25-26, were representatives of the majority of the states west of the Mississippi River, to hear discussions on the plans and operations of Public Law 569, passed by the 84th Congress to provide Medical Care for the Dependents of Military Personnel. This meeting followed a previous meeting in Chicago called by the American Medical Association of all of the states and territories.

Attending the Denver meeting, representing the Oklahoma State Medical Association were: H. H. Macumber, M.D., Chickasha, Chairman of the Association's Committee on Medical Service, Hospitals and Prepaid Insurance, and Dick Graham and Don Blair from the Executive Offices.

The discussions were principally devoted to the manner in which the State Medical Associations would designate their individual contracting agencies, and fiscal representatives. Based on preliminary reports by representatives of the states in attendance the Contracting Agent would be the individual State Associations with Blue Shield acting as the Fiscal Agency only.

Public Law 569 goes into effect on December 7, 1956.

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Five Physicians Receive Life Memberships



At a recent meeting of the Tulsa County Medical Society, five veteran Tulsa physicians were presented certificates of Life Membership in the Oklahoma State Medical Association.

Pictured left making the presentation is Wilkie D. Hoover, M.D., Tulsa surgeon and Councilor to the Oklahoma State Medical Association.

Left to right receiving the certificates are: Harry Dale Murdock, M.D., Delbert O. Smith, M.D., James H. Neal, Sr., M.D., Fletcher L. Nelson, M.D., and Ernest W. Reyolds, Sr., M.D. The five have a total of 243 years of practice.

East Central Society, VA Jointly Sponsor Seminar

Oklahoma physicians are cordially invited to attend the Seminar on Management of Traumatic Injuries sponsored jointly by the East Central Oklahoma Medical Society and the Veterans Administration Hospital staff, November 1, 1956 in Muskogee.

Program

Afternoon—Auditorium Veterans Administration Hospital

Welcome—D. H. Miller, M.D., Manager, VAH, Muskogee

Moderator—Chester K. Mengel, M.D., VAH, Muskogee

2:00-3:00 p.m.—*Management of Traumatic Injured,* Earl D. McBride, M.D., from the point of view of an Orthopedist (Oklahoma City); Clifford Allen, M.D., from the point of view of a Radiologist (Oklahoma City). *Comments*—Donald R. Adams, M.D., VAH, Muskogee.

3:30-4:00 p.m.—Coffee Break

4:00 p.m.—William N. Weaver, M.D., Moderator—*What's Your Diagnosis—Differential Diagnosis of Abdominal Conditions,* Hugh Bennett, M.D., Internist, VAH, Houston; George Brown, Jr., M.D., Surgeon, McAlester; Simon Dolin, M.D., radiologist, Oklahoma City.

Evening—Hotel Severs

7:30 p.m.—Dinner

8:30 p.m.—*Abnormal Bleeding Problems in Pregnancy,* Roy G. Holly, M.D., Omaha, Neb.

Five hours accreditation will be given in Catagory II for attending this program.

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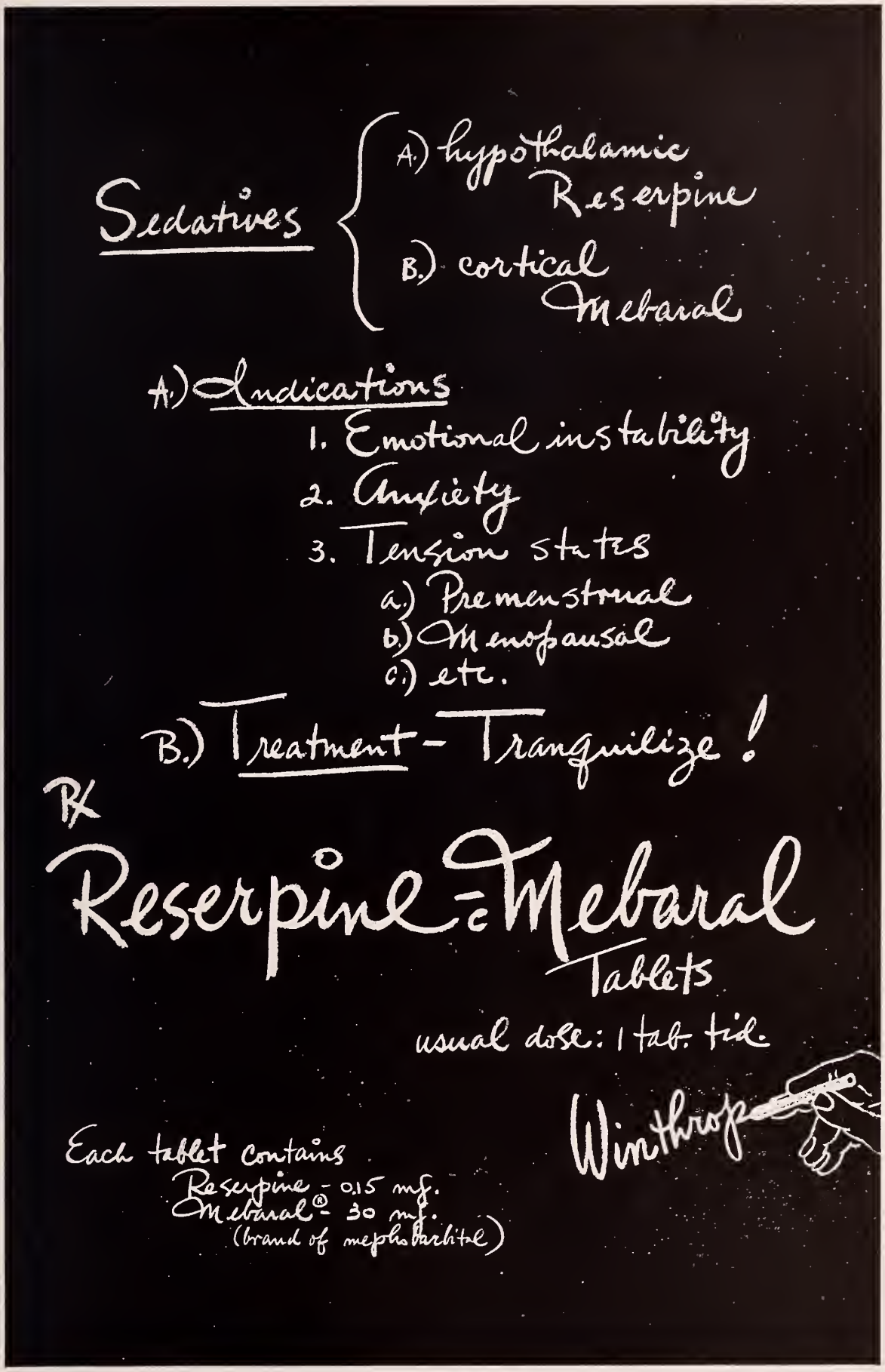
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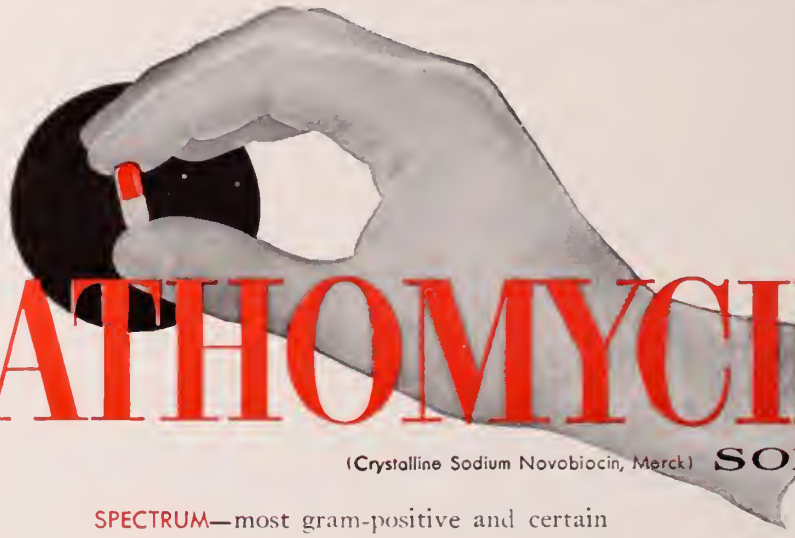
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OKLAHOMA CITY CLINICAL SOCIETY

October 22-23-24-25, 1956 — Biltmore Hotel

PROGRAM

Monday, October 22

9:00 a.m.—*Chronic Pelvic Pain,* Dr. Willis E. Brown, Little Rock, Ark.

9:30 a.m.—*Anesthesia Errors in Obstetrics,* Dr. Henry B. Turner, Memphis, Tenn.

10:00-10:30 a.m.—*Visit the Exhibits*

10:30 a.m.—*Interpretations of the Knee Injuries,* Dr. Edward T. Evans, Minneapolis, Minn.

11:00 a.m.—*Diverticulitis of the Colon,* Dr. Albert Behrend, Philadelphia Pa.

11:30 a.m.—*Vertigo, Dizziness and Giddiness: Their Differential Diagnosis,* Dr. Kenneth B. Corbin, Rochester, Minn.

9:30 a.m.—Specialty Lecture—*Correlation of BMR, Serum Cholesterol, I^{131} Uptake and Serum PBI in the Differential Diagnosis of Thyroid Disease,* Dr. William H. Beierwaltes, Ann Arbor, Mich.

9:30 a.m.—Specialty Lecture—*Primary Closure of the Exstrophied Bladder,* Dr. A. Keller Doss, Fort Worth, Tex.

12:15-1:40 p.m.—*Luncheon—Round Table Discussion.*

2:00 p.m.—*Ocular Emergencies,* Dr. Rufus C. Goodwin, San Francisco, Calif.

2:30 p.m.—*Radiographic Evaluation of the Genito-Urinary System,* Dr. A. Keller Doss, Fort Worth, Tex.

3:00-3:30 p.m.—*Visit the Exhibits*

3:30 p.m.—*Treatment of Hyperthyroidism,* Dr. William H. Beierwaltes, Ann Arbor, Mich.

4:30 p.m.—*The Unknown Killer of Obstetrics,* Dr. Henry B. Turner, Memphis, Tenn.

4:30 p.m.—*Thyroid Nodules, Their Significance, Diagnosis and Treatment,* Dr. Patrick J. Fitzgerald, New York City, N. Y.

2:30 p.m.—Specialty Lecture—*Common and Uncommon Causes of Hemorrhage from the Gastro-Intestinal Tract,* Dr. Albert Behrend, Philadelphia, Pa.

2:30 p.m.—Specialty Lecture—*Pertinent Observations with Reference to Bone Tuberculosis, Its Morbidity, Mortality and Modern Concepts of Its Treament,* Dr. Edward T. Evans, Minneapolis, Minn.

7:00 p.m.—*Banquet—Sponsored by the Oklahoma County Medical Society.* Guest Speaker—Harold W. Elley, Ph.D., Wilmington, Del.

Tuesday, October 23

9:00 a.m.——*Observations of the Growth Rate of Human Tumors,* Dr. Vincent P. Collins, Houston, Tex.

9:30 a.m.—*The Diagnosis and Treatment of Brachial Pain Problems,* Dr. Kendall B. Corbin, Rochester, Minn.

10:00-10:30 a.m.—*Visit the Exhibits*

10:30 a.m.—*Clinical Pathological Conference,* Dr. Patrick J. Fitzgerald, New York City, N. Y.; Dr. Gordon Meiklejohn, Denver, Colo.

9:30 a.m.——Specialty Lecture—*The Urinary Tract and the Gynecologist,* Dr. Willis E. Brown, Little Rock, Ark.

9:30 a.m.—Specialty Lecture—*The Surgical Management of Gastric Cancer Based on the Pathological Study of the Lymphatic Spread,* Dr. Gordon McNeer, New York City, N. Y.

12:15-1:40 p.m.—*Luncheon—Round Table Discussion*

2:00 p.m.—*Shoulder Cuff and Shoulder Injuries,* Dr. Edward T. Evans, Minneapolis, Minn.

2:30 p.m.—*Surgical Jaundice,* Dr. Albert Behrend, Philadelphia, Pa.

3:00-3:30 p.m.—*Visit the Exhibits*

3:30 p.m.—*Treatment of Hypothyroidism,* Dr. William H. Beierwaltes, Ann Arbor, Mich.

4:00 p.m.—*Prophylactic Gynecology,* Dr. Willis E. Brown, Little Rock, Ark.

4:30 p.m.—*Urological Problems of Interest to the Man in General Practice,* Dr. A. Keller Doss, Fort Worth, Tex.

2:30 p.m.—Specialty Lecture—*The Influence of Soaps and Detergents on Skin Physiology,* Dr. Donald J. Birmingham, Cincinnati, Ohio

2:30 p.m.—Specialty Lecture—*Tidy Obstetrics,* Dr. Henry B. Turner, Memphis, Tenn.

7:00 pm.—*Annual Clinic Dinner Dance,* Persian, Room, Skirvin Tower Hotel; Dr. Harry Wilkins, President, Presiding

Wednesday, October 24

9:00 a.m.—*Contact Dermatoses Produced by Over-Treatment,* Dr. Donald J. Birmingham, Cincinnati, Ohio

9:30 a.m.—*Problems in Chomotherapy,* Dr. Gordon Meiklejohn, Denver, Colo.

10:00-10:30 a.m.—*Visit the Exhibits*

10:30 a.m.—*Retarded Growth and Development in Infants and Children,* Dr. John F. Crigler, Jr., Boston, Mass.

11:00 a.m.—*Management of Common Nasal Complaints*, Dr. Joseph H. Ogura, St. Louis, Mo.

11:30 a.m.—*Melanoma—Treatment and End Results*, Dr. Gordon McNeer, New York City, N. Y.

9:30 a.m.—Specialty Lecture—*"Corneoscleral Sutures*, Dr. Rufus C. Goodwin, San Francisco, Calif.

9:30 a.m.—Specialty Lecture—*X-Ray Diagnosis of the Aging GI Tract*, Dr. Vincent P. Collins, Houston, Tex.

12:15-1:40 p.m.—*Luncheon—Round Table Discussion*

2:00 p.m.—*Use of Steroid Hormones in Various Allergic Disorders*, Dr. Ethan Allan Brown, Boston, Mass.

2:30 p.m.—*Accelerated Growth and Development in Infants and Children*, Dr. John F. Crigler, Jr., Boston, Mass.

3:00-3:30 p.m.—*Visit the Exhibits*

3:30 p.m.—*The Treatment of External Ocular Diseases*, Dr. Rufus C. Goodwin, San Francisco, Calif.

4:00 p.m.—*Advances in Viral Diseases*, Dr. Gordon Meilkejohn, Denver, Colo.

4:30 p.m.—*Hoarseness: Diagnosis and Treatment*, Dr. Joseph H. Ogura, St. Louis, Mo.

2:30 p.m.—Specialty Lecture—*Basic Problems of Drug Allergy*, Dr. Ethan Allan Brown, Boston, Mass.

2:30 p.m.—Specialty Lecture—*A Review of Recent Concepts Regarding the Physiology of the Brain Stem Reticular Formation*, Dr. Kendall B. Corbin, Rochester, Minn.

6:30 p.m.—*Specialty Group Dinners*

Thursday, October 25

9:00 a.m.—*The Pulmonary Cripple*, Dr. Ethan Allan Brown, Boston, Mass.

9:30 a.m.—*X-Ray Examination of the Chest in Pediatrics*, Dr. Vincent P. Collins, Houston, Tex.

10:00-10:30 a.m.—*Visit the Exhibits*

10:30 a.m.—*Hobbies, Hazards and Skin Health*, Dr. Donald J. Birmingham, Cincinnati, Ohio

11:00 a.m.—*End Results in the Treatment of Gastric Cancer*, Dr. Gordon McNeer, New York City, N. Y.

9:30 a.m.—Specialty Lecture—*The Present Concept of Adrenal Steroid Biosynthesis and Its Importance in Understanding and Treating Patients with Adrenal Hyperplasia*. Dr. John F. Crigler, Jr., Boston, Mass.

9:30 a.m.—Specialty Lecture—*Present Status of Cancer of the Larynx*, Dr. Joseph H. Ogura, St. Louis, Mo.

12:15-1:40 p.m.—*Luncheon—Round Table Discussion*

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1. Weiss, E., and English, O.S.: Psychosomatic Medicine. W. B. Saunders Co., Philadelphia, 1949, p. 358.

2. Lemere, F.: Northwest Med. 54:1098 (Oct.) 1955.

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[1]Posner, A. C., *et al.*; Further Observations on the Use of Tetracycline Hydrochloride in Prophylaxis and Treatment of Obstetric Infections, *Antibiotics Annual* 1954-55, pp. 594-598.

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Many refrain from bringing up the subject out of a sincere respect for their doctor, supposing it somehow unbecoming to talk to him about money. Many professional societies are now trying to clear up this misconception. For example, you may have noticed a significant plaque which hangs in thousands of physicians' waiting rooms. It says:

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Sometimes, of course, your doctor cannot tell you, in advance, precisely what a course of treatment or an operation is going to cost. But you will always find him willing to discuss the subject, and to tell you if he can. Today more than ever before in medical history, the bill your doctor sends you can represent one of the really big bargains of your life—in terms of health, happiness and peace of mind.

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The reproduction on the facing page is the latest example of this advertising. It tells the public that they can discuss medical fees with their physicians without embarrassment . . . and that such discussions improve the important relationship between doctor and patient.

We are gratified at your response to these public messages, and you can be sure that Parke-Davis national advertising will continue to be in our *mutual* best interests.

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Hospital Liable For Employee 'Medical Acts'

The "Medical News" published by the Ciba Pharmaceutical Products Inc. stated in its September 10, 1956 issue that the New York State's Court of Appeals has ruled that a non-profit hospital is liable for an employee's negligence in certain "medical acts" as well as "administrative acts."

Up to now New York courts have held that a nonprofit hospital may not be held liable for negligence in medical acts performed under supervision of doctors and nurses.

In the decision recently announced reversing a ruling of the Appellate Division of the State Supreme Court in the much discussed case of Berg vs. New York Society for the Relief of the Ruptured and Crippled, the Court of Appeals, as the State's highest court, has further reduced the area of immunity from malpractice actions for nonprofit hospitals.

Award Upheld

The New York Court of Appeals upheld the original trial court's finding that the defendant hospital was liable for a technician's error in a blood test prior to a transfusion. It affirmed the lower court's award of a judgment for $17,500 to the plaintiff, Mrs. Rose S. Berg, for injuries resulting from transfusions of incompatible blood based on the erroneous blood analysis.

The technician had mistakenly reported her blood type as A-Rh positive, when it was in fact A-Rh negative. Complications during and after the ensuing pregnancy included stillbirth and a vaginal hysterectomy.

In its opinion, which was unanimous, the Court of Appeals ruled that the blood test was a "medical act in the sense that it was preparatory to a transfusion."

Narrows Gap

This opinion thus has the effect of narrowing, without fully closing, the gap between legal liability and immunity under the legal definitions of "medical acts" and "administrative acts." Both are legal terms, and even veteran jurists do not agree on the definitions.

The trial court, for example, held the blood test to be an *administrative* act, for which the hospital was liable. The Appellate Division reversed this finding on grounds that the test was a *medical* act, for which the hospital was not liable.

The Appellate Division said in part: "As we read the prevailing authorities in this state, the negligent act in this case bears a sufficiently direct and immediate relation to the care and treatment specified for the plaintiff by her own physician to require that the judgment below be reversed and the complaint dismissed."

Court's Opinion

In reversing this decision, the Court of Appeals ruled that although the test was a "medical act," it was performed "not by a physician or nurse but by a technician who was employed and paid by the hospital and who was so far short of professional status or attainments that only four to six weeks training was necessary for her job. She was no independent practitioner of a learned profession . . . but a salaried employee."

The opinion, written by Justice Charles S. Desmond, said in part:

"Not only do they (modern hospitals) furnish room and board to patients but they sell them services which are 'medical' in nature and, though furnished on physicians' orders, are performed wholly by and under the control of the hospitals' salaried staffs.

"What reason compels us to say that of all employees working in their employers' businesses (including charitable, educational, religious and governmental enterprises) the only ones for whom the employers can escape liability are the employees of hospitals?"

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Committee on Medical Service Work on Public Law 569

The Committee on Medical Service, Hospitals and Prepaid Insurance, composed of: H. H. Macumber, M.D., Chickasha, Chairman, Horton E. Hughes, M.D., Shawnee, J. E. Highland, M.D., Miami, Henry T. Russell, M.D., Enid, C. M. Bielstein, M.D., Oklahoma City, Gerald Rogers, M.D., Oklahoma City and Walter E. Brown, M.D., Tulsa, has been designated by President H. M. McClure to do the necessary research and planning to implement Public Law 569, commonly referred to as Medical Care for the Dependents of Military Personnel.

The Committee has already had two meetings, and has made a preliminary report to the Council.

Council Approves Preliminary Report

The Committee made four recommendations to the Council at the Council Meeting on September 9, 1956. These recommendations were:

1. That the Association participate in this program.
2. That a Contract of no more than one year duration be entered into.
3. That the Oklahoma State Medical Association act as its own Contracting Agency.
4. The Blue Shield plan act as the fiscal agency.

Fee Schedule

Under the provisions of the Act, the medical care to be rendered dependents will be on a service basis, and the Association must negotiate a fee schedule with the Department of Defense. The Nomenclature for the Fee Schedule that has been prepared by the Department of Defense covers over 1400 schedules.

The Council further authorized the present studying Committee to continue its work, including the working out of a Fee Schedule which subsequently, will be submitted to the Council.

County Society Sent Questionnaire

Concerning the problem of fees, all County Medical Society Secretaries were sent a questionnaire the latter part of August, and over 75 per cent of the County Societies have already returned the questionnaires.

Cancer Conference Speakers Named

The Oklahoma Division of the American Cancer Society announces their annual meeting to be held at the University of Oklahoma Medical School auditorium on December 8, 1956.

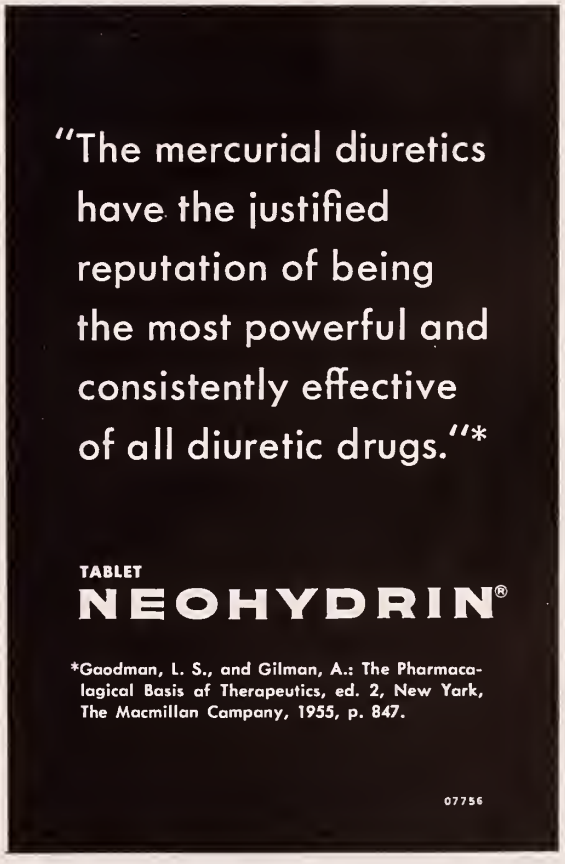
Joe Parker, M.D., chairman of the Professional Education Committee has announced that the following out-of-state physicians will be among the guest speakers on the program:

Roger A. Harvey, M.D., head of the Department of Radiology at the the University of Illinois College of Medicine.

Hayes Martin, M.D., attending Surgeon at Memorial Hospital and Assistant Professor of Clinical Surgery at Cornell University Medical College, New York City.

John R. Schenken, M.D., Professor of Pathology and Bacteriology at the University of Nebraska Medical School, Omaha, and Director of Laboratories at Nebraska Methodist Hospital.

Richard W. TeLinde, M.D., Professor of Gynecology at Johns Hopkins Medical School, Baltimore, Md.



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Doctor Finis W. Ewing Subject of Special Article

The *Muskogee Daily Phoenix*, in its September 9, issue carried a special article concerning the life history of Doctor Ewing, who was the President of the Oklahoma State Medical Association in 1941-42.

The article told interesting anecdotes in Doctor Ewing's life and the honors that had come to him over the years by virtue of his public service records, and his contribution to his profession.

He is an honorary life member of the Masonic Bodies, and the Shrine, and the Oklahoma State Medical Association. He is a Charter Member of the Muskogee Kiwanis Club.

Doctor Ewing was born at Cornelia, Missouri, January 10, 1876. Dr. and Mrs. Ewing live at 2802 West Broadway, Muskogee, Oklahoma.

OSMA Woman's Auxiliary Holds Annual Fall Meeting

The Annual Fall Conference of the Woman's Auxiliary to the Oklahoma State Medical Association was held in the headquarters of the Oklahoma State Medical Association on October 5, 1956.

Presiding over the meeting was Mrs. L. Gordon Livingston of Cordell, President of the organization.

Attending the meeting were the Presidents of the County Auxiliaries, the Officers of the State Auxiliary, Chairmen of the Committees and many Members-at-large.

The meeting included reports from the Officers and the Committees, as well as panel discussions.

Over fifty members were in attendance and the meeting constituted the largest meeting so far held in the new Executive Offices.

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Dosage:
1 to 2 teaspoonfuls three or four times daily.

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Each cc. contains:
Methscopolamine bromide ..... 1 mg.

Dosage:
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ATARAXOID exerts the anti-rheumatic, anti-inflammatory activity of STERANE distinctly superior to previous steroids, effective in radically reduced dosage, and with minimal disturbance of electrolyte and fluid metabolism.

The ataractic effect is a central neuro-relaxing action – the result of a marked cerebral specificity – free of mental fogging and devoid of any major complications: no liver, blood or brain damage. This peace-of-mind component is also used in the lowest dosage range.

Supplied: Each green, scored, ATARAXOID oral tablet contains 5 mg. prednisolone (STERANE) and 10 mg. hydroxyzine hydrochloride (ATARAX). Bottles of 30 and 100.



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simultaneously **controls the symptoms and the apprehension**

In Rheumatoid Arthritis, other collagen diseases, bronchial asthma and inflammatory dermatoses

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Federal Funds for Hospital Construction Receive Approval

The Oklahoma State Department of Health, State Agency for the Federal-Aid Hospital Construction Program (Hill-Burton), has announced final approval at the state level of the Revised State Plan and the Project Construction Schedule for the fiscal year 1956-57, following approval by the State Hospital Advisory Council on September 16, 1956, and affirmed by the State Board of Health on September 23, 1956.

G. F. Mathews, M.D., State Commissioner of Health, said that the construction schedule was determined on a basis of relative need, utilization and eight other priority factors, including the nature and scope of the proposed projects and ability of the sponsor to construct, maintain and operate.

Sponsors for each project on the 1956-57 schedule will be allowed 90 days to indicate whether they desire to exercise their priority rights, and an additional 90 days to satisfy the financial requirements for the sponsor's share of costs if they wish to proceed with the project.

Approved projects for 1956-57 under Part C (the original Hill-Burton program) include the following:

Hillcrest Medical Center, Tulsa. 94-bed addition. Total estimated cost, $2,000,000; Federal allotment, $283,333.67.

St. Anthony's Hospital, Oklahoma City. 120-bed addition. Total estimated cost, $1,392,044.84; Federal allotment, $137,500.00.

Muskogee City-County Health Department, Muskogee. Heating system. Total estimated cost, $10,500; Federal allotment, $5,250.

Jackson County Health Deparament, Altus. New public health center. Total estimated cost, $50,000; Federal allotment, $25,000.

University Hospital, Oklahoma City. X-ray, therapy and addition to Out-Patient Department. Total estimated cost, $510,782; Federal allotment, $204,312.80.

Oklahoma Osteopathic Hospital, Tulsa. 60-bed addition. Total estimated cost, $647,859; Federal allotment, $259,143.

Grady County Health Center, Chickasha. New 75-bed general hospital and public health center. Total estimated cost, $1,376,800; Federal allotment, $510,000.

Approved projects for 1956-57 under Part G (1954 Medical Facilities Act, covering Diagnostic and Treatment Centers, Rehabilitation, Nursing Homes, and a renewed emphasis on Chronic Disease Hospitals) include:

St. Anthony's Hospital, Oklahoma City. Out-Patient Department. Total estimated cost, $147,955.16; Federal allotment, $73,977.58.

Oklahoma Osteopathic Hospital, Tulsa. Out-Patient Department. Total estimated cost, $147,955.16; Federal allotment, $73,977.58.

Comanche County Memorial Hospital, Lawton. New 40-bed chronic disease wing. Total estimated cost, $300,000; Federal allotment, $150,000.

Oklahoma Osteopathic Hospital, Tulsa. New 26-bed chronic disease wing. Total estimated cost, $176,901; Federal allotment, $88,450.

Mary Hurley Nursing Home, Coalgate. New 40-bed nursing home. Total estimated cost, $200,000; Federal allotment, $100,000.

All above proposed projects are subject to final approval of the Revised State Plan for 1956-57, and the Project Construction Schedule, by the Surgeon General, Public Health Service.

Projects approved *tentatively* for 1957-58, contingent on Federal appropriations and unknown projects of higher priority, include:

Murray County Health Center, Sulphur. New 25-bed general hospital and public health center. Total estimated cost, $425,000; Federal allotment, $173,000.

Bristow Health Center, Bristow. 16-bed addition. Total estimated cost, $92,055.90; Federal allotment, $36,822.

Tahlequah City Hospital, Tahlequah. Addition. Total estimated cost, $83,000; Federal allotment, $33,000.

Nowata General Hospital, Nowata. 17-bed addition. Total estimated cost, $150,000; Federal allotment, $60,000.

Thomas Memorial Hospital, Thomas. 10-bed addition. Total estimated cost, $57,985; Federal allotment, $23,194.

Cordell Memorial Hospital, Cordell. New 22-bed general hospital. Total estimated cost, $311,000; Federal allotment, $86,000.

Sapulpa City Hospital, Sapulpa. New 35-bed general hospital. Total estimated cost, $511,000; Federal allotment, $204,640.

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(Excellent, too, for stimulating appetites of the elderly patient!) Dosage: 0.5 to 1 cc. (10-20 drops) daily. Each cc. (20 drops) contains:

l-Lysine	300 mg.
Vitamin B_{12}	25 mcgm.
Thiamine (B_1)	10 mg.
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but it wa
my arms
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Physicians To Attend Seattle Meeting

The 10th AMA Clinical Meeting will be held in Seattle, November 27-30. This is the second time the meeting has been held on the West Coast. The previous West Coast meeting was held three years ago in Los Angeles.

Scientific Program

Major emphasis at this Clinical Meeting will be in the fields of Obstetrics, Fractures, Heart Disease, and Psychiatry. Other scientific topics will include Arthritis, Dermatology, Gastro-Intestinal Diseases, Neurology, Gynecology, Pediatrics, Pulmonary Diseases, and Surgery.

Oklahomans Will Attend

Those who will attend from Oklahoma include, Doctors McClure, President of the Oklahoma State Medical Association, Wilkie D. Hoover, Tulsa, John F. Burton, Oklahoma City, Delegates to the AMA, and E. H. Shuller, McAlester, and Malcom E. Phelps, El Reno, Alternate Delegates to the AMA.

Oklahoma Physicians who may be going to Seattle for the Meeting can make advance registration by writing the AMA.

For hotel reservations, write direct to the Seattle Hotel Association, 315 Seneca, Seattle, Washington, and designate time of arrival and their desires concerning hotel rate brackets. Headquarters for the housing of the Delegates of the AMA will be the Olympic Hotel where no reservations are available.

SW Cancer Conference Will Meet in Ft. Worth

Mark October 26 and 27 on your calendar as a reminder of the Southwestern Cancer Conference to be held in Fort Worth, Texas.

Among the visiting distinguished speakers will be:

W. A. D. Anderson, Professor of Pathology, Miami University; W. Emory Burnett, Professor of Surgery, Temple University and Don Childs, Professor of Radiology, University of Minnesota.

This conference is sponsored jointly by the Tarrant County Medical Society and the American Cancer Society.

Oklahoma Physician To Appear On Endocrinology Program

Henry H. Turner, M.D., of Oklahoma City, past president of the Association, will participate on two panels at the 8th Postgraduate Assembly in Endocrinology and Metabolism to be held October 22-27, 1956 at the Texas Medical Center in Houston, Texas.

Twenty-three clinicians and investigators from various parts of the country will compose the faculty for the Assembly program which is jointly sponsored by the Endocrine Society, M.D. Anderson Hospital and Tumor Institute, where it will be held, and The University of Texas Postgraduate School of Medicine.

The course is designed to cover the main aspects of diagnosis and therapy in the field of endocrinology and metabolism for the physician in general practice and for those in other specialties who wish to have a general knowledge of this rapidly growing field.

Registration is limited to 100. Tuition fee is $100.00 which will be paid to The Endocrine Society for assembling the out-of-state faculty.

If further information is desired please write to: Office of the Dean, The University of Texas, Postgraduate School of Medicine, Texas Medical Center, Houston 25, Texas.

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Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.: J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.: Brit. M. J. 2:755, 1953.

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"Ninety per cent of the children passed all of their ascarides . . ."

Brown, H. W.: J. Pediat. 45:419, 1954.

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"Diet. The basal diet of the aged should be designed according to the same principles as applied to other adult groups. However, because of the frequently low total consumption of food, it is wise to encourage a liberal intake of protein and other protective foods. Three or four meals per day should be planned. The aged tolerate large meals poorly. Foods with soft bulk should be included. Fats should be restricted according to each patient's tolerance. In general, it is wise to avoid fried and fatty foods." Chapter 13—Drs. William H. Sebrell, Jr., and James M. Hundley, *Geriatric Medicine*, Edited by Edward J. Stieglitz M.S., M.D., F.A.C.P., Third Edition, J. B. Lippincott Company.

(Complete formula together with amino acid, vitamin and mineral assays will be sent on letterhead requests.)



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The high caloric requirements of infants, coupled with the fact that they have little ability to digest starchy food, are indications for the use of an easily digested carbohydrate milk modifier.

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Sears-Roebuck Plan Offers Financial Assistance to Doctors

For the past two years the American Medical Association has been cooperating with the Sears-Roebuck Foundation in a program which is hoped to fill the gap in providing improved medical care where there is the greatest need.

The Foundation makes an annual grant of $125,000 which is placed in a revolving fund and made available to physicians desiring to establish practices or to improve existing facilities.

Individual physicians may receive unsecured loans in amounts up to $25,000. The primary objective of the program is to improve medical services and facilities in suburban and rural areas.

The interest rate ranges from zero to six per cent over a 10 year period depending on the rapidity of repayment. There is no charge for administration of the program as this is met by additional Foundation Funds.

To date the Foundation has made 22 loans, affecting 33 physicians, in 13 states totaling $172,000. Oklahoma has received four of these loans. So that applications may be processed efficiently, there are two cut-off-dates, October 1 and April 1. Applications received prior to October 1 will be decided upon no later than December 15. Applications received between October 1 and April 1 shall be decided upon no later than June 15.

Applications should be sent to the office of the region in which the proposed medical plan is to be established. Detailed information concerning this plan may be obtained from the office of the Oklahoma State Medical Association.

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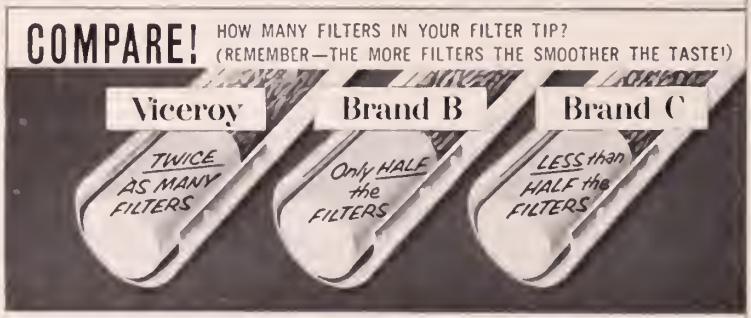
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Have You Heard?

ELVIN M. AMEN, M.D., Bartlesville physician left recently for San Antonio, Texas where he has been called back into the Air Force.

ROBERT G. ALLEN, M.D., Bartlesville, discussed poliomyelitis and the Salk vaccine at the Bartlesville Kiwanis Club recently.

WARREN AUSTERMAN, M.D., Konawa physician for eight years, entered the army medical corps in July as a captain.

ROBERT M. BIRD, M.D., Oklahoma City, spoke on "Medical Considerations in Splenectomy" at the regular monthly clinical conference held at the McAlester Clinic.

EUGENE BOND, M.D. has recently been discharged from the air force and is taking a surgical residency in Oklahoma City. Prior to entering service, he practiced in Fairfax.

REECE R. BOONE, JR., M.D., formerly of Montgomery West Virginia, is the new chief surgeon at the Northwest Community Hospital in Mooreland.

LEONARD H. BROWN, M.D. has recently opened offices at 430 Northwest 12 Street, Oklahoma City.

GLENN W. COSBY, M.D., Miami physician is the new chairman of the board of directors of Ottawa County's Red Cross chapter.

REX DAUGHERTY, M.D. has joined the Walker-Manning Clinic in Pawhuska. He has just completed his internship at Hillcrest Hospital, Tulsa.

JOHN DEVORE, M.D., Oklahoma City, spoke on the various types of leukemia at a Comanche-Cotton Medical Society meeting.

LEONARD P. ELIEL, M.D., head of the clinical cancer section of the Oklahoma Medical Research Foundation, has been named acting director.

JAMES MITCHELL FITE, M.D. has recently taken over duties in obstetrics and gynecology at the Fite Clinic in Muskogee.

J. DOUGLAS GREEN, M.D., Cushing, spoke on the Salk vaccine at a PTA meeting in Cushing recently.

WILLIAM T. GYLES, M.D., formerly from Rush Springs has opened his offices in Harrah.

ROBERT E. HERNDON, M.D. of the Chickasha Hospital and Clinic, has been notified of his certification by the American Board of Pediatrics.

R. A. HILL, M.D., a graduate of the University of Oklahoma School of Medicine has opened his practice in Antlers.

F. W. HOLLINGSWORTH, M.D. has resumed his practice in El Reno after three years surgical residency in surgery in Oklahoma City.

J. E. HOLLIS, M.D., Bristow, has been named chief of staff of the Bristow Memorial Hospital.

GEORGE H. JENNINGS, M.D., former Wetumka physician has opened offices for the practice of obstetrics and gynecology at the Medical Center Building in Oklahoma City.

ROGER G. JOHNSON, M.D., Frederick physician has recently joined JOE HORTON, M.D. and F. P. FRY, JR, M.D. in the Medical-Surgical Clinic, Frederick.

WILLIAM P. JOLLY, M.D., internal medicine specialist, has joined FRANK H. AUSTIN, M.D. in the Medical Center, Lawton.

E. M. POER, M.D., Mangum, was president of the Greer County Homecoming committee for a celebration held in July.

THURMAN SHULLER, M.D., McAlester, spoke on the Salk vaccine at a recent PTA meeting in that city.

GEORGE R. SMITH, JR., M.D., has set up practice at the Bassett Clinic, Cushing. Doctor Smith's practice is limited to Internal Medicine and Diseases of the Heart and Lung.

ORANGE W. STARR, M.D., practicing physician in Drumright for 41 years has recently retired.

PATRICK SHANKS, M.D., Enid, has been awarded a fellowship in the American Academy of Obstetrics and Gynecology.

HENRY H. TURNER, M.D., W. K. WEST, M.D. and E. S. LAIN, M.D. will attend the Golden Anniversary Meeting of the Southern Medical Association to be held November 12, 13, 14, 15, 1956 in Washington, D.C.

J. L. WHEELER, M.D., Texhoma, spoke on Simple First Aid at a recent meeting of the Texhoma Rotary Club.

LEROY A. WOLEVER, M.D., formerly of Midwest City, is now practicing in Shidler.



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Association Represented At Public Relations Institute

Representatives of Oklahoma medical societies recently attended the American Medical Association's 1956 Public Relations Institute in Chicago.

Mr. Don Blair, Associate Executive Secretary of the State Association, Mr. Jack Spears, Executive Secretary of the Tulsa County Medical Society and Mrs. Alma O'Donnell, Executive Secretary of the Oklahoma County Medical Society represented their respective organizations.

The Institute is presented annually as a service to state and county medical societies and is open to representatives of these societies, their auxiliaries, to medical school public relations personnel and to others working in the field of medical public relations.

Three hundred participated in this year's conference, the theme being: "What's Cooking in Medical PR?" Representatives from state and county societies presented public relations "recipes" which had been tried and proven effective in their organizations.

Mr. Blair talked to the group on "The Public Relations Potential of the Medical Detail Man". He outlined the history of the Medical Service Society of America and explained how a close relationship between this organization and the state and county medical societies could benefit organized medicine from a public relations standpoint. Specifically, Mr. Blair enumerated joint projects in Oklahoma where the profession was rewarded as a result of this close cooperation. In summary, he concluded, "Our close relationship in Oklahoma with the detailmen has resulted, in effect, to the addition of some 60 or 70 field representatives to our staff. By virtue of their vocation. these men are considered by many to be spokesmen for medicine—what better group could we find to meet with, work with and educate as to our activities, philosophies and objectives than this made-to-order group of goodwill ambassadors?"

Other discussions covered such topics as: "Local Science Fairs", "Orientation of the Medical Society Newcomer", "Communicating Through Effective Speaking," and "Improving Doctor-Lawyer Relationships."

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Deaths

ISAAC NEWTON KOLB, M.D.
1882-1956

Isaac N. Kolb, M.D., pioneer Blanchard physician died July 31, of a heart ailment.

He was born near Fairy, Texas, July 27, 1882. Doctor Kolb attended medical school at Fort Worth University and received a Doctor of Medicine degree from "Physicians and Surgeons College," St. Louis, Missouri, in 1923.

Doctor Kolb set up his practice in Blanchard in 1924 and has been there for the past fifty years.

JOHN REYNOLDS, SR., M.D.
1874-1956

John Reynolds, Sr., M.D. Muskogee physician died July 14, age 82.

Doctor Reynolds was born in Muskogee, February 26, 1913 and graduated from the University of Arkansas School of Medicine before entering the Army in 1941. After being discharged from the Army he settled in Muskogee.

LEE ROY WILHITE, M.D.
1895-1955

Lee Roy Wilhite, M.D., Perkins physician died July 9, as a result of coronary occlusion.

Doctor Wilhite was born at Helena, Okla., October 17, 1895. He attended the University of Oklahoma and graduated from the University of Oklahoma School of Medicine in 1916.

Doctor Wilhite served three years in the U. S. Army. Following this he located in Perkins, where he practiced until 1942, when he again returned to military service as Colonel, U. S. Army Medical Corps. He returned to Perkins following World War II, and has practiced there ever since.

During his military career Doctor Wilhite was decorated with the Czechloslovakian Military Medal of Merit, the French Croxi de Guerre, the U. S. Legion of Merit, the Bronze Star with Oak Leaf Clusters, and appropriate campaign ribbons.

Doctor Wilhite held offices in county and state associations and served as vice-president of the Oklahoma Academy of General Practice.



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"Because of the better and more consistent absorption of penicillin V from the intestinal tract, it would appear that this type of penicillin is preferable to penicillin G when oral administration is to be used."[1]

1. Martin, W. J., et al.: J.A.M.A. *160*:928 (March 17) 1956.

PEN•VEE•*Oral* and PEN•VEE *Suspension* permit new dependability in oral-penicillin therapy—dependable stability in gastric acid, dependable and optimal absorption in the duodenum. "Not being destroyed by acid in the stomach, as is penicillin G, penicillin V remains available in larger amounts for absorption."[1]

PEN·VEE* *Oral* and *Suspension*

PEN•VEE•*Oral* is Penicillin V, Crystalline (Phenoxymethyl Penicillin)
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125 mg. tetracycline per 5 cc. teaspoonful. Bottles of 2 fl. oz. and 1 pint, packaged ready to use (no reconstitution required).
READILY ACCEPTED delightfully different fruit flavor . . .
RAPIDLY ABSORBED fine particle dispersion—therapeutic blood levels within one hour . . .
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BOOKS RECEIVED

The following books have been received by the *Journal office*. As space permits and the context warrants, books will be reviewed.

CIBA FOUNDATION COLLUQUIA ON ENDROCRINOLOGY. Vol. IX, Internal Secretions of the Pancreas. Editors G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch. and Cecilia M. O'Connor, B.Sc., Medical Book Department, Little, Brown and Company, Boston, Mass. Copyright 1956.

CIBA FOUNDATION SYMPOSIUM ON HISTAMINE. Editors, C. E. W. Wolstenholme, O.B.E. M.A., M.B., B.Ch. and Cecilia M. O'Connor, B.Sc., Little, Brown and Company, Boston, Mass., Copyright, 1956.

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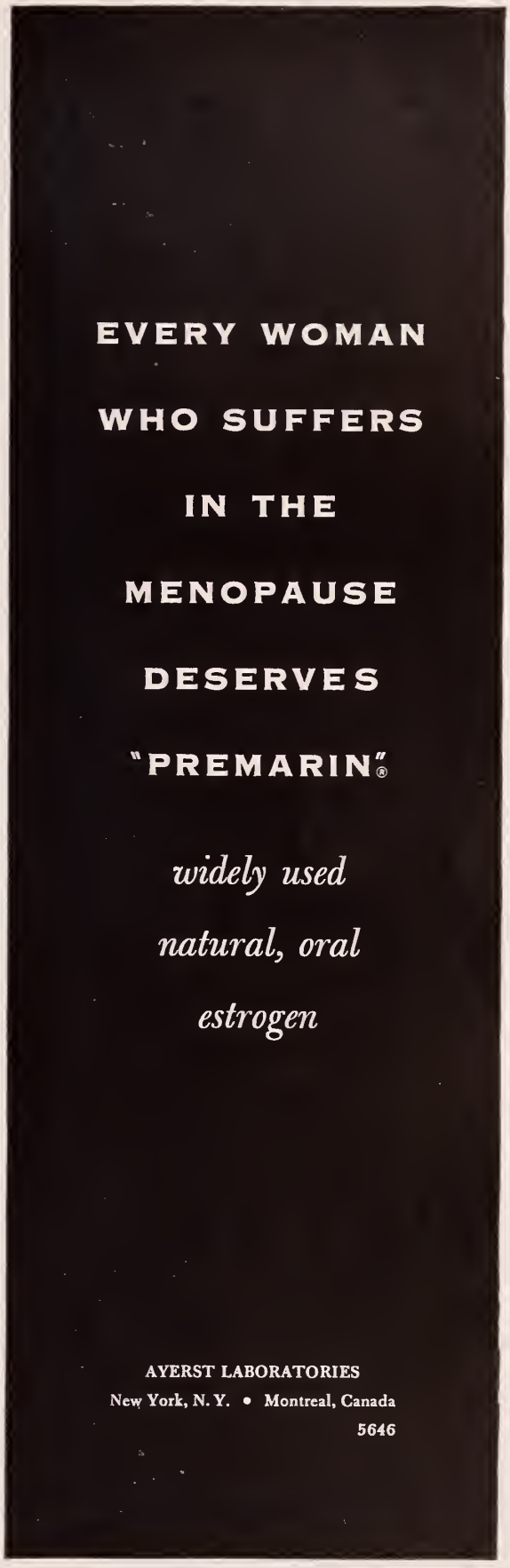
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MANAGEMENT OF EMOTIONAL PROBLEMS IN MEDICAL PRACTICE. Edited by Samuel Liebman, M.D., Medical Director, North Shore Health Resort, Winnetka, Illinois: Clinical Assistant Professor of Psychiatry, University of Illinois College of Medicine. Publishers, J. B. Lippincott Company, Philadelphia.



PHYSICIAN PLACEMENT

The following physicians have expressed a desire to locate in Oklahoma. To the best of our knowledge, the names, addresses, qualifications and availability are current and accurate.

Additional information concerning most of these physicians is available in this office. Anyone interested in contacting these physicians may do so directly or may use the state office as an intermediary.

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

John R. Lindbergh, Box 217, Weleetka, Oklahoma, Age 29, University of Oklahoma, 1953, Interned in Kansas City General Hospital, Veteran, available immediately.

Internal Medicine

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Pathology

Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, George Washington University, 1950, will finish four years pathology residency in January, 1957.

Pediatrics

David Goldstein, 66 Lafayette Ave., Staten Island 1, N. Y., age 38, Long Island College of Medicine, 1949, two year residency in pediatrics, Board certified, available after Oct. 1, 1956.

Surgery

Edward Wendell Foster, 147 W. Main, Meriden, Conn., age 62, Harvard University School of Medicine, 1924, certified by specialty board, veteran, available now, would consider surgery, obs.-gyn., or general practice.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available Jan. 1, 1957.

Boyd M. Saviers, 514 Lacewood Dr., Dallas, Texas, age 33, University of Oklahoma, 1947, finishing third year residency at Methodist Hospital of Dallas, veteran, available September, 1956.

Richard A. Walsh, 250 Fourth St., Elyria, Ohio, age 31, New York University, 1948, completed Part I, American Board of Surgery.

Urology

Harry Emanuel Fisher, Jr., Box 161, Barnes Hospital, St. Louis 5, Missouri, age 33, University of Oklahoma, 1952, veteran, available July 1, 1956.

Henry Ernest Wolfe, Jr., 879 Rosewood Ave., Vallejo, Calif., age 34, Albany Medical College, 1947, board qualified in urology, available upon separation from active duty, Aug. 15, 1956.

CLASSIFIED ADS

WANTED: GENERAL PRACTITIONER. OKLAHOMA LICENSE REQUIRED. SALARY OPEN. Family Residence and Maintenance Available at Nominal Cost. Good Setup for Recent Graduate, Retired Serviceman, or Older Man Seeking Regular Hours and Less Strenuous Work. Contact Supt. Oklahoma Veterans Home Facilities, Sulphur, Oklahoma.

Editorials

Oklahoma Hospitals and Internships

There are six hospitals in Oklahoma, including the University group of hospitals, that offer internships to graduating students of medicine. These internships are approved by the Council on Medical Education and Hospitals of the American Medical Associations.

The people of the State of Oklahoma and the School of Medicine have a stake in these internships, for they are part of the system of medical education. An internship is the fifth year of the student's training and is just as much a requirement as is the first, second, third and fourth. The quality of training that is offered in these hospitals must be a concern of the University, for its function in the field of medicine is far more than an academic one and is not terminated with the awarding of a degree in medicine.

The School of Medicine is obligated to supply graduates who will:

1. Serve the medical needs of the people of the state as practitioners.
2. Serve as public health officers.
3. Teach.
4. Enter into the field of research.

The faculty of the School of Medicine has the obligation of appraising students with these categories in mind. The student should be encouraged to enter that field in which he can give the best service. The potentially great teacher and great man for the field of research must not be allowed to let himself be blinded by the glitter of material things.

The majority of students are best suited for the practice of medicine. Some of these can afford the time and the money necessary to pursue a specialty. Many of them, however, prefer for one reason or another to do general practice in relatively small communities in the State. It is training for this that our private hospitals are well suited. Often a boy wants to take an extra year to make himself a little better equipped in surgery, internal medicine, obstetrics or some other field. He is not thinking of specialty board certification. He just wants to make himself a little better doctor. The Board of Regents must have had the practitioner in mind when the School of Medicine was authorized to increase the first year enrollment to 100 students.

In a learning situation such as an internship the small amount of what might be considered exploitation is desirable. Most of what an intern is required to do adds to his store of knowledge and experience. The boy who wants to be spoon fed and who is looking only for pearls is an abomination now-and-later. The School of Medicine must concern itself with the program for education and training that these hospitals have developed. Defects and areas for improvement should be pointed out. If satisfied with the program then the school should give these hospitals the strongest support possible.

The School of Medicine is doing a splendid job of post graduate medical education. There is, however, no better stimulus to study and stock-taking on the part of the staff than an alert intern fresh from the halls of learning. Let us hope that an increasing harmony of purpose in training young doctors will prevail among all our institutions and among all physicians who will have any part in preparing them for their future work.

Competence To Practice

From a statement prepared by Paul R. Hawley, M.D., Director of the American College of Surgeons for the Bulletin of the College, the following paragraph is taken:

"It has been contended that competence to practice in special fields should be determined by colleagues. There is a far better judge of competence—the physician himself. If a physician undertakes a procedure which, if he were the patient, he would not permit one of his level of competence to undertake on himself, he is incompetent to do it. The moral limit of practice of every physician, specialist and general practitioner, was fixed almost two thousand years ago by the Great Physician who said: 'Therefore all things whatsoever ye would that men should do to

you, do ye even so to them . . .' He who practices within this limit is honest with his patients; and he who steps out of it betrays the trust placed in him."

To lift a paragraph and repeat it out of the context is unfair, and would be so here, were it not for the validity of the statement in any context. We need to demonstrate that we can more nearly approach the Golden Rule within the framework of our system than would be possible under any other. This is an individual responsibility, not something that one can let Joe do.

Diabetes Week

What is Diabetes Week?

It is the third week of November set aside eight years ago by the American Diabetes Association and is dediciated to education for the benefit of the diabetic.

Increased longevity has increased the population of "over 40" persons and likewise increased the number of diabetics. Statisticians have established that we have 2.5 million known diabetics in the United States and at least one million persons who have diabetes and do not know it.

The detection phase of Diabetes Week is a means or method of transmitting this information to the general public. It is a public service which the American Diabetes Association is endeavoring to render and one which year after year for the past eight years has been received most graciously by diabetics, relatives of diabetics, friends and acquaintances of diabetics and also the medical profession.

Why this notice or announcement to doctors? Because medical records of patients too many times indicate that doctors have, in the rushed and busy hours of their practice, failed to collect a urine specimen or do a blood sugar on patients, as frequently as they should. Every doctor regardless of specialty very frequently has to deal with the ravages of untreated or neglected diabetics. Diabetic coma, premature cardiovascular disease, retinitis, dermatitis, diabetic gangrene, obesity, malnutrition, difficult to control infections, slow to heal surgical wounds and many other conditions too numerous to mention could be prevented or easily controlled if the patient and the doctor were both fully aware and both cooperative in respect to the management of diabetes. How could preventive medicine be more satisfactorily and easily practiced than by the early recognition of diabetes by both the physician and the patient.

During Diabetes Week there will be many programs arising from national radio broadcasting systems and television systems, calling attention to the public the simple facts. Local, state, county and city organizations and, in some districts, health associations will have detection and education programs during Diabetes Week.

As a member of the committee on Detection and Education of the American Diabetes Association for the past several years, it has been a great source of pleasure to learn of the gradual success which physicians have met in connection with lowering the percentage of complicated diabetes in the hospitals and in their offices and, as a member of that committee and as chairman of the state committee and of the Oklahoma County Medical Association committee on Diabetes Detection and Education, it is again my pleasure to call to your attention this splendid program for November 11 to 17, 1956, and solicit your earnest cooperation.

May we as physicians be more diligent in the performance of frequent urinalysis and blood sugars and may we also not forget to instruct our diabetic patient that other members of the family are much more likely to have diabetes than those who do not have it in their families. Also watch the overweight and over forty patients carefully for diabetes and last, but not least, make a special effort to remind the diabetic who has strayed from his diabetic management and warn him to the effect that he is subject to the same complications as the unknown diabetic who is entirely untreateed.

Joslin has said, "There is enough knowledge today for the adequate treatment of diabetes, but it needs more general and more intense application and the development in the patient for a deeper sense of his own responsibility for his care."—*Hugh Jeter, M.D.*

Scientific Articles

Observations on A
DIAGNOSTIC COURT SERVICE

G. W. KLEINSCHMIDT, M.D.

THE AUTHOR

G. W. Kleinschmidt, M.D., is a graduate of the University of Nebraska and is a member of the American Psychiatric Association. Doctor Kleinschmidt was Chief of the Department of Mental Health at Central State Griffin Memorial Hospital at Norman, and is now Clinical Director at the Eastern State Hospital at Vinita.

The following paper is based upon the observations of 103 consecutive subjects committed to Central State Hospital between August 1, 1954, and March 10, 1956, under the Mental Health Act of 1953, providing 90-day commitment for observation of subjects with criminal charges. All the patients were returned for disposition prior to April 1, 1956. It excludes four instances of regularly committed patients, who had criminal charges or were likely to have criminal charges, and were returned for administrative disposition. It also excludes approximately four inmates transferred from the state penitentiary at McAlester for either treatment or examination prior to being brought up for parole. It does not include numerous patients, approximately 50, who were regularly committed because of various previous offenses, usually crimes of alcoholism or sex offenses.

In this group were ten juveniles, 14 to 17 years of age, inclusive. The age groups were broken down as follows:

14 to 17 years of age	10
18 to 29 years of age	49
30 to 44 years of age	26
45 to 59 years of age	10
60 years and over	8

The marital status of these patients revealed an interesting fact.

Married	36
Separated	2
Single	48
Divorced	17
Sex—Female	9
Male	94

The distribution by counties in this district of central Oklahoma was for the most part according to population with some notable exceptions. Oklahoma County naturally had the most with 40, but this was not out of proportion to its population. There was no apparent difference percentage wise of urban, small city, and rural inhabitants. There were 11 from the eastern and western districts combined.

An attempt was made to evaluate the religion of these subjects, but this proved to be quite unsatisfactory. In many instances a mere preference of a particular church was given, which was more or less meaningless as far as activity or emotional conviction were concerned. There were about six subjects who did openly express sincere religious interests. One of these was an active clergyman, and two were prominent church laymen. As a group, however, the extent of religious participation appears to be considerably below average for Oklahoma.

Approximately 42 of the group had some measure of alcoholic tendencies, although in about 20 of these it was merely a symptom of the total antisocial personality. In approximately 23 is seemed quite pertinent to the alleged offenses, such as driving while intoxicated or assault while under the influence of intoxicants, etc. Again, exact data in this regard were unsatisfactory because of the sometimes unreliability of the patient's history, as well as staff differences of opinion on what is alcoholism.

Twenty-four of the group were charged with some type of overt sex offense. Six were either rape or attempted rape, six were molestation of a minor, two were crimes against nature, one of which was sodomy and the other bestiality. Eleven of the sex offenses were of the minor variety, usually

indecent exposure or other type of lewd conduct such as a telephone call or contributing to the delinquency of a minor. In other words, 11 were minor offenses, and 14 were major offenses, and in one instance the act of sodomy was performed with the consent of an adult. There were several instances of a sexual motivation behind one of the other types of offenses. In two instances, subjects were arraigned on charges of burglary of women's panties and undergarments, and several cases of assault were sexually motivated. Following is a table of the offenses:

Sex—11 minor, 6 molesting children, 6 rape or attempted rape, 2 crimes against nature.	
Robbery and Burglary	18
Forgery	14
False Pretenses	2
Car Theft	12
Assault	7
Murder	4
Attempted Suicide	4
Child Abandonment	2
Other	15

Formal and informal social service information was obtained in approximaetly two-thirds of the cases. It was quite useful if properly interpreted in light of motivational factors of the families. Sometimes family contacts were valuable in interpreting the true situation to the family.

Psychological testing was done in every case. Occasionally it revealed subconscious psychotic phenomena suggesting the possibility of a latent psychoticepisode. This is not usually pertinent to legal aspects of competency. The range of intellectual endowment was as follows:

Mental Deficiency Moderate	7
Borderline	10
Dull Normal	12
Average	48
Bright Normal	18
Superior	8

There are approximately two to two and one-half times as many borderlines and defectives as in the general population.

The diagnoses of these 103 patients were as follows:

Anti-social personality with or without alcoholism or with neurotic reaction	44
Chronic alcoholic and other personality disorders with chronic alcoholism	24
Mental deficiency with or without psychosis	7
Chronic brain syndrome (incompetent)	3
Acute brain syndrome with recovery due to alcoholism	3
Sexual deviate, primary	3
Schizophrenic reaction, chronic undifferentiated	3
Schizoid personality	3
Obsessive, compulsive personality	2
Epilepsy	2
Anti-social personality with chronic psychotic reaction	2
Pirmarily neurotic (both female)	2
Manic depressive	1
Involutional psychosis	1
Schizophrenic reaction, catatonic type	1
Adolescent adjustment reaction	1
Paranoid Personality	1

There is a startingly low percentage of primary neurotics. This is consistent with the 20th Century phenomena of seeing mental illness as a behavioral reaction. It is the individual versus society rather than in primary emotional conflict of the id versus the ego and super-ego, or instinct versus guilt. The disposition was as follows:

No disease affecting criminal responsibility, administrative disposition. (This excludes those who were regularly committed and returned for administrative disposition.)	83
Escaped prior to administrative disposition. (Released by Writ of Habeas Corpus with Administrative disposition.)	2
Mentally Incompetent	17
Recommended for Commitment	11
Mentally incompetent, no special recommendations	6
Recommended for non-corrective institutional placement, foster homes	3
Diminished Responsibility	2

Of the group of incompetents eight were clearly psychotic, and six were mental defectives.

There was a definite conservatism on the part of the staff to make recommendations to the court other than give the pertinent legal findings, such as intelligence, presence of amnesia, pertinent physical findings, and relationship of alcohol or other intoxicants. In some cases the prognoses were given. There was a white, married female of 33 years, who had an Acute Brain Syndrome due to alcoholism, but with a severe underlying neurotic reaction, and diminished responsibility was recommended, but hospitalization was not indicated.

The writer was called to testify in five of the 103 cases. In one instance, competency was not an issue, but rather the evaluation of personality factors. The writer was subpoenaed by the defense in one case and

by the state in the other four. In one case the patient was found by us to be legally sane, but he was immediately committed to another state hospital. Of the 83 patients that were returned to the courts for regular administrative disposition this is the only one that we have any record of subsequent commitment.

There appears to be, on the whole, a good relationship between the private psychiatrists and those in this state hospital as shown by the paucity of the number of "battles of the experts," which ensued among these 103 subjects. Several patients obtained private consultation without our recommendation being contested. It is actually the purpose of this section of our statute to avoid same. Also, there is apparently a fairly good acceptance of medical-legal judgment by the referring courts and even defense lawyers. There were several instances of accused subjects referred to state hospitals outside of this district, as well as 11 received here from the other two districts, usually for personal reasons.

Several patients, as well as their families, frankly admitted that their reason for asking for the 90-day commitment was in order to obtain treatment rather than to stand trial. The legal aspect of the individual's competency was never actually questioned. Such statements as, "I want to find out why I keep writing hot checks." Treatment under these circumstances is usually poor. Many recidivists want to get a history of mental hospitalization in their record as a means of obtaining clemency, veterans compensation, etc. Sometimes it is merely a legal maneuver on the part of defense attorneys to delay trial or suggest to the court a mental illness. There were several cases of acute brain syndrome with psychosis due to alcoholism which recovered a few days after admission. These were returned to the court as legally responsible. Usually the individual went into delirium tremens while incarcerated in the jail.

No attempt is made here to ascertain the various causes of criminality or delinquency in these subjects. In the younger age group, particularly those under 20 years of age, inconsistencies or undue leniencies in parental discipline were found.

Only in cases of acute toxic psychoses was immediate treatment instituted. There were several people who benefited by supportive interpretation. Several acted out in jail, threatening suicide, feigning confusion, etc., but these symptoms abruptly ceased after administrative disposition, even after returning to their previous jurisdictions.

The various tests for criminal responsibility were applied. According to the Oklahoma statutes, if an individual knows the nature and the quality of an act, and if he understands that the acts is wrong and is able to stand trial, he is considered legally responsible. An acute psychosis caused by alcoholism or drug addiction is not a defense. Generally speaking if an individual was overtly psychotic, he was recommended for exculpation and usually regularly committed; whether or not the patient would require hospitalization, notwithstanding the charges, was of value. The mere presence of a mental illness, even a treatable one would not in itself be a case of exculpability. There is a very thin and cloudy line frequently between a Schizoid personality, especially in an Indian, and a chronic undifferentiated schizophrenic. However, unless the process is definitely progressive, the subject would be responsible in most instances.

Certainly, no treatable psychotic has been considered competent except the aforementioned acute brain syndrome with alcoholism, and they have recovered to stand trial. Sodium amytal interviews were performed in six patients in an attempt to uncover a latent psychosis. This rarely really adds any worthwhile findings not available by conventional methods and is considered an unnecessary physical hazard. The patient and counsel construe it as an attempt to determine guilt, for which it is quite unreliable.

Despite quite varied backgrounds among our staff, all psychiatric schools being represented, the criterion of responsibility is surprisingly uniform here. Possibly the other state hospitals will vary somewhat with ours, and there is a need to eliminate these inconsistencies.

When a person was considered as incompetent and also a menace to the public safety, he was recommended for commitment. Only two of the patients who were committed on this basis have been released

to date. One was an elderly man charged with molesting girls and was released to the wife and Department of Public Welfare for supervision. The other was deported to a state hospital in another state. Several others are in active treatment; the remainder are receiving no specific treatment. Likewise, there is a very thin line sometimes between sickness and behaviorism in many chronic alcoholics. One wonders if certain severe recidivists, particularly those with marked neurotic features, should not be criminally committed to a separately governed institution for the mentally ill. This would be similar to the Sexual Psychopath Act used in 18 states. In any case, there is a need for intermediate sentences for these habitual offenders. We have found patients with personality disorders, who were regularly committed and who had criminal tendencies, were frequently a security problem and contaminated the entire atmosphere and appeared at many times to be using the hospital for their own needs. We have even had dissension among the staff and other patients because of the difficulties in managing such problems. Probably the most serious legal problem affecting our state hospitals is the chronic alcoholic or other personality disorder, such as a sexual deviate, who is a repeated offender. He frequently slips into the hospital relatively unnoticed. Sometimes charges have been dropped in order to get him regularly committed. Often he makes a fair adjustment for a few weeks, usually under the guise of some other diagnosis. Later it is realized that he cannot respond to the usual mileu and other treatment of the hospital and is released. He subsequently becomes involved in further difficulties, and both the family, courts, and community now believe that he is an out and out mentally ill person. It is with considerable more difficulty that administrative decisions are made in such instances. For this reason, it is definitely urged that the courts commit persons with significant previous charges on 90-day observation commitment. There is no question but what the courts frequently desire to get rid of a community nuisance or even menace by sending him to the hospital, rather than subject him to repeated jail sentences.

In conclusion, 103 consecutive patients admitted not to exceed 90 days for observation for persons accused of criminal acts under Section 60 of the Mental Health Law of 1953 were reviewed. It is definitely felt that the operation under this act has been quite successful, and there has been good co-operation between private psychiatrists and the referring courts. This law has been quite valuable for the protection of the patient and the community.

Approximately 16 per cent of the subjects were considered mentally incompetent. There appears to be a need for the special long term treatment of the sexual deviate and certain alcoholics, preferably in a separate environment.

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Special Announcement

The American College of Physicians Postgraduate Course will be held November 26-30 at the University Hospitals, Oklahoma City, Okla.

The subject will be "Selected Problems in Internal Medicine" under the direction of S. G. Wolf, M.D., Professor of Medicine, University of Oklahoma School of Medicine.

For registration and further information write to: E. R. Loveland, Executive Secretary, 4200 Pine Street, Philadelphia 4, Pa.

Registration fee $30.00 for members and $60.00 non-members.

POISONING *By Organic Phosphorus* INSECTICIDES

WALTER F. SETHNEY, M.D.

At the present time a fairly large number of organic phosphorus compounds are being used as insecticides, particularly in agriculture. Cases of poisoning resulting from the accidental ingestion, or absorption during use, occur quite frequently.

A brief outline dealing with symptomatology and treatment is presented herewith.

I. *COMPOUNDS UNDER CONSIDERATION*

Chlorthion. Demeton, Diazinon, Dipterex, Malathion, Hexaethyl tetraphosphate HETP), Tetraethyl pyrophosphate (TEPP), Parathion.

II. *SAMPLE TRADE NAMES UNDER WHICH THESE COMPOUNDS ARE AVAILABLE AS INSECTICIDES:*

Bladex, Hexamite, Killer, Tetratone, Tetron-DX, Tetron-50, Vapotone Bacco Spray, Vapotone Dust, Aphamite, Corothion, Genithion, Kilphos, Mackothion, Paradust, Paraphos, Penphos, Plantthion, Vepophos.

III. *USE OF PHOSPHORUS INSECTICIDES*

A. Principal use as contact poisons for aphids, mites, and thrips.

B. Usage widespread and may be found where the following crops are grown: Fruit, vegetables, cotton, tobacco, alfalfa, cereal grains, hops, nuts, berries, and sometimes to control insects on ornamental plants.

C. They are NOT used for insects attacking man or animals or for insects in households, storage rooms, etc.

IV. *EXPOSURE TO PHOSPHORUS INSECTICIDES.*

A. Men engaged in manufacturing of insecticides should wear complete protective clothing.

B. Workmen applying insecticides need not wear rubber aprons or rubber boots if care is exercised. All clothing should be washed before re-use. If poisons wet the clothing or contact the skin, work should stop and the victim should remove clothing, wash thoroughly with soap and water and change into clean clothing.

THE AUTHOR

Walter F. Sethney, M.D., Tulsa Pediatrician is a graduate of the College of Physicians and Surgeons at Columbia University, New York City. He is a member of the American Board of Pediatrics.

C. Full face masks should be worn by personnel applying aerosols or by pilots in spraying from airplanes.

D. Exposure may occur at any stage in handling or spraying or in harvesting of fruits or vegetables that have been sprayed but insufficiently weathered —(at least 30 days).

V. *TOXICOLOGY AND PHARMACOLOGY*

A. They are cholinergic agents (the toxic symptoms resemble those produced by excessive stimulation of the parasympathetic nervous system).

B. These insecticides are potent inhibitors of cholinesterase. As a result of the inhibition of this enzyme, acetylcholine accumulates in the tissues, and produces effects resembling prolonged stimulation of cholinergic nerves.

C. Organic phosphates are freely absorbed through the skin, the conjunctiva, the respiratory tarct, and the gastrointestinal system.

VI. *SIGNS AND SYMPTOMS OF ORGANIC PHOSPHATE POISONING*

A. Muscarine-like effects—these are the earliest signs and are referrable to post ganglionic cholinergic nerves. Symptoms occur within 1-2 hours after exposure.

1. GI: Anorexia, nausea, vomiting, abbominal cramps, diarrhea, tenesmus, substernal pressure suggestive of cardiospasm.
2. Glands
   a. Sweat glands: Increased sweating to profuse diaphoresis.
   b. Salivary glands: Increased salivation.
   c. Lacrimal glands: Increased lacrimation.
3. Heart and Peripheral Vascular Sys-

tem: Increased blood pressure, increased pulse rate, palpitation, flushing of the skin.
4. Respiratory System: Bronchospasm giving "tightness of the chest," asthmatic-like breathing, increased bronchial secretions.
5. Pupils: Myosis, pin-point pupils, dimness of vision.
6. Ciliary Body: Blurring of vision.
7. Bladder: Frequency, involuntary micturition.

B. Nicotine-like effects—these are preganglionic and somatic motor nerve effects.
1. Muscles
a. Muscular fasciculations, especially of the eyelids.
b. Muscle cramps, especially of the legs.
c. Weakness.
d. Muscular incoordination.

C. Central Nervous System
1. Restlessness, anxiety, giddiness, drowsiness.
2. Headache: Severe and not relieved by analgesics.
3. Slurred speech.
4. Mental confusion.
5. Visual distortions.
6. Convulsions.
7. Coma.

D. The average time interval between the last exposure to an organic phosphate and death is $10\frac{1}{2}$ hours, and between the onset of symptoms and death is nine hours. Diagnosis depends upon the awareness of the syndrome and a high index of suspicion.

VII. *TREATMENT OF ORGANIC PHOSPHATE POISONING*

A. This is a medical emergency.
B. Remove clothing, wash with soap and water.
C. Gastric lavage 1:5000 $KMnO_4$ (1 gm. or 15 gr. in 5000 cc or 5 qts. water).
D. Avoid fats and oils, as they promote absorption.
E. Atropine is the best antidote (never morphine).
Atropine 1M 1-2 mg. (1/60-1/30 grain) every hour until atropinization occurs (blurred vision, dry mouth, dilated pupils). Continue under atropine for 24-48 hours.
F. If severe respiratory symptoms occur. suction or tracheotomy may be necessary.
G. Postural drainage and oxygen therapy.

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The Clinical Management of

HODGKIN'S DISEASE

WALTER E. BROWN, M.D.

THE AUTHOR

Walter E. Brown, M.D., Tulsa physician is a graduate of Washington University in St. Louis, Missouri.

Doctor Brown's specialty is Radiology and he is a member of the American College of Radiology and the Radiological Society of North America.

Introduction

It has been more than a century now since Thomas Hodgkin first described the finding which we know today as Hodgkin's disease. Hodgkin was a pathologist at Guy's Hospital in London, and described "some morbid appearances of the absorbent glands and spleen." We can't do much better than this in the way of description today; it is still a painless, progressive enlargement of the lymph nodes with involvement of the spleen in some 60-70 per cent of the cases. The diagnosis is correctly made by biopsy of an enlarged lymph node, usually from the cervical chain. The histologic structure is readily identifiable by the appearance of certain multinucleated giant cells described by Sternberg and by Dorothy Reed. In recent years

it has been shown that these specific cells may also be identified in the bone marrow of patients with Hodgkin's disease[1], probably in as high as 20 per cent of the cases.

The disease is rare. Hoster[7] estimated some 2.5 cases of Hodgkin's disease per 100,000 of living persons in the United States, a figure which was borne out well in statistics compiled from the Armed Forces in World War II. This latter study also highlights another well documented fact regarding age incidence which hits a distinct peak in the third decade, the 20-30 year age group. There is a definite preponderance of males affected, some 2:1 over females.

The etiology of the disease is obscure. Sternberg originally thought that this was definitely a form of tuberculosis and demonstrated acid-fast bacilli in the sections which he studied. However, James Ewing, M.D., among others, was unable to duplicate Sternberg's work and although Doctor Ewing himself stated "Tuberculosis follows Hodgkin's disease like a shadow"[3] the Sternberg theory has been virtually discarded.

Likewise, the original work done by Doctor Poston at Duke University showing close correlation between Hodgkin's disease and brucella infection has not been conclusive. As pointed out by Schier[11], it is probable that lymph nodes in any individual may contain organisms that are entirely unrelated to Hodgkin's disease from the etiologic standpoint. There has been a continued interest in the possibility of infection as the casual agent in this disease, however, and the similarity between Hodgkin's disease and certain viral tumors produced in laboratory animals must be stressed. Avian lymphomatosis, chicken cell sarcoma, mouse leukemia, and mouse mammary carcinoma are neoplasms that can be initiated by viruses and behave similarly in the laboratory animal to Hodgkin's disease in the human body. In attempting to answer the question as to why Hodgkin's disease is not communicable if it is infectious in origin, Schier states that these certain tumors, notably mouse mammary carcinoma, occur spontaneously in the adult animal although inoculation with the virus occurred during the nursing period of the animal. In other words, a long latent period is normal, and this may be the case in Hodgkin's disease. Schier thinks that the recording of 32 cases of familial Hodgkin's disease in the literature is "more than fortuitous circumstance." In a study of 43 pregnant women who had Hodgkin's disease, it was determined by Kardon[8] that three had offspring who developed the disease, an incidence of nine per cent.

Diagnosis

It is probably a good rule of thumb to consider that any palpable peripheral lymph node that remains enlarged for as long as three weeks should be examined microsocpically. The Hodgkin's node is most often in the cervical region. There is nothing about its gross character that is completely reliable as a diagnostic aid although usually it is discrete and movable and usually it is nontender. It may happen, however, that the first manifestation will be a mediastinal node visualized on a routine chest film, and there is a temptation to give such a lesion a so-called trial of radiation therapy, the assumption being that if it is radiosensitive, the probability of Hodgkin's disease or some related lymphoblastic lesion is great enough that treatment may then be continued without resorting to any surgical procedure for positive diagnosis. This concept is wrong in theory. In the first place, there is the possibility that the tumor mass seen in the x-ray film represents a bronchogenic carcinoma that happens to exhibit some degree of radiosensitivity. and one would thus be depriving the individual of the chance for complete excision and cure. Actually, the problem may often be resolved by the use of a Silverman needle for biopsy of these masses in the anterior mediastinum without resorting to thoracotomy.

In a patient with no presenting nodes who exhibits unexplained fever, anemia, vague bone and joint pains and possibly a difficultly managed pruritus, one should remember that sternal marrow aspiration may well show the classic Sternberg cells of Hodgkin's disease.[1] The value of this procedure for differential diagnosis of a possible blood dyscrasia need only be mentioned.

Sensitivity to alcohol as a symptom of Hodgkin's disease has been noted and analyzed by several reporters in recent years, most recently by Godden[6], and it has been

suggested that if pain following ingestion of alcoholic beverages is elicited that a patient should be investigated closely for the presence of Hodgkin's disease, since the symptom appears unique in this particular disease.

Clinical Management

What then is the procedure to be followed with the diagnosis of Hodgkin's disease firmly established by means of biopsy? First of all, is it possible to eradicate the disease by thorough surgical excision of the tissue which is visibly involved? It has not been my good fortune to see such a case where this was possible except in one instance where the disease process happened to be confined entirely to the stomach, surgery being done for a gastric tumor which was demonstrated by roentgenologic study. Craver reported on a study of 10 cases which were submitted to radical neck dissection where the disease seemed localized to the cervical chain by all known methods of detection, and found extension in all but one case.[2] At his institution, Memorial Hospital in New York, attempted radical surgical excision is presumably limited to cases showing well circumscribed involvement in the high cervical nodes only, and to the rare instance where the involvement is in the stomach only. Craver feels that "There simply has not yet been sufficient correlated experience with early surgical operation on apparently unicentric Hodgkin's disease to enable an assay of its true worth." It is generally acknowledged that an axillary or inguinal node is never indicative of unicentric disease, representing, at best, an extension from another source; there is also every reason to assume that low cervical nodes are, at best, indicative of a lower mediastinal origin.

If the disease is not to be surgically extirpated, how then is it to be treated? We know that there are certain chemical compounds to which the Hodgkin's tissue is markedly sensitive, notably nitrogen mustard. It may be reasonable to use nitrogen mustard initially in some cases where the disease has disseminated widely when the patient is first seen. This would, of course, be a logical mode of attack in abdominal Hodgkin's where the involvement is usually widely dispersed through the mesenteric nodes. Another chemical compound, triethylene melamine, so-called TEM, has also been shown to be effective against this tissue. However, the effect from TEM is delayed for at least ten days to two weeks, and it is a known bone marrow depressant. Nitrogen mustard also has this latter disadvantage and is an extremely difficult preparation for the patient to tolerate, intravenous administration being necessary and severe nausea and systemic reaction being the rule rather than the exception. The use of radioactive isotopes, for which such high hopes were held, not only in this disease but in other malignacies, has been totally unsuccessful in Hodgkin's disease.

With due consideration for all modalities, x-ray therapy seems the logical first choice. It is easily administered, reasonably well tolerated, and the patient may remain ambulatory. At this point, however, a most important consideration arises, and this is, what is the patient to be told and who henceforth is responsible for his treatment? The intelligent handling of the patient at this time is of the utmost importance, to explain to him that he has a most serious disease but that it can be managed to his advantage with his cooperation, that there is no proven danger of his transmitting the disease to any other person, that he will have to continue periodic check-ups for the rest of his life, and that he will probably require recurrent therepeuatic measures for his disease as long as he lives. It seems to me that the one to outline all this to him and the doctor who should now take over the case is the radiologist, the physician who is to give him his radiation therapy. It is all well and good to talk about teamwork among doctors in the management of any illness and to contemplate a conference of all physicians concerned regarding whatever step in treatment is indicated. But this is not practical in the long-run management of the individual. What he wants to know and what he must know is who is his doctor. Whom does he call about a new node or newly discovered lump somewhere in his body? Whom does he go to about a skin rash? Who counsels him about his fever, his bone and joint pains, etc? The doctor most directly concerned is the radiologist, and the management of the

patient with Hodgkin's disease rests securely in his hands. The fact that he is doing radiation therapy at all should indicate that he has accepted certain responsibilities to his patients in the clinical management of disease. This proposal in no way precludes consultation with the general practitioner or specialist if the need arises, any more than consultation with the radiologist would be precluded for the referring physician in any sickness.

The actual listing of technical factors involved in accepted radiation therapy is redundant in a discussion of this sort. The kilovoltage range usually employed is 200-250. In treating the first discovered locus of the disease in the cervical nodes, it may be the opinion of the radiologist that an attempt at complete obliteration by radiation should be made. In this case, dosage up to 2500 or 3000 r tumor dose in one series of treatments spaced over a two week period may be warranted. Assuming that the disease progresses to involve other areas, the amount of radiation necessary to cause regression of a group of nodes to an appreciable measure is more on the order of 600-800 r to one area in one series. It is impossible to estimate how long a given patient may be carried on intermittent recurrent radiation therapy. We have one patient under observation at the present time who has had known Hodgkin's disease for 18 years with no therapy other than occasional x-radiation when indicated and who is in the best of health at the present time. It is folly to consider any case as hopeless and beyond definite palliation.

It was my privilege to treat another young woman with Hodgkin's disease who showed extensive involvement of the lumbar vertebrae and right lower ribs, and yet with intermittent radiation therapy it was possible to keep her relatively free from pain for some four years after these lesions became apparent, and at least in the area of bone destruction in the 12th rib actual bony regeneration was accomplished. Craver[2] cites the case of a woman with this disease who was completely paralyzed from the waist down in 1939, but who recovered complete use of her limbs following radiation therapy to the appropriate level of the spine and who had no recurrence of her paralysis for the remaining 12 years of her life. One is simply not justified in giving a prognosis of early death or disability in these cases just because of widespread involvement by the disease.

One of the most troublesome manifestations of the disease is a deep "bone ache" that these people seem subject to, with radiating pains down the back and legs, extremely disabling and difficult to explain from the anatomic standpoint. Repeated x-ray studies of the spine may be negative and neurologic examination non-revealing. The most helpful medication in these cases in my experience has been Phenylbutazone. The administration of 400 mgms daily will commonly bring about dramatic cessation of pain in 48 hours. In my own cases the dose is then usually dropped to 300 mgms daily and eventually a maintenance does of either 200 mgms or 100 mgms daily. A 39 year old man under my management has been continued on 100-200 mgms daily now for 25 months, the drug being discontinued only once during a two week period when he was hospitalized for administration of nitrogen mustard. All attempts at discontinuance of medication have resulted in prompt recurrence of the severe back and leg pains, and with all due regard for the known toxic properties of this durg continued use has not brought on any known complications. The use of Phenylbutazone is not simply a trial and error procedure. Rottino, et al[10] reported in 1954 on its use in 35 patients with Hodgkin's disease, 18 of whom suffered from the type pain referred to above. Results were considered gratifying in all but one of these 18 patients. In my own experilaence the drug has been useful principally in control of pain and in notable reduction of the peculiar fever that characterizes Hodgkin's disease and is often of the classic Pel-Ebstein pattern. Rottino, however, also observed definite improvement in pruritus in a significant number of cases, and in at least one case there was definite regression of mediastinal nodes, demonstrable on a chest film, under Phenylbutazone therapy alone. At any rate, this seems to be a chemotherapeautic measure that is of tremendous aid in the treatment of Hodgkin's disease.

The use of nitrogen mustard is also a calculated risk that is justifiable in this disease. In reviewing the cases that have come under my supervision in the last 10 years, it seems apparent that earlier and possibly more frequent use of this drug was indicated. These individuals not infrequently suffer a profound anemia, for instance, even when no direct evidence of active disease can be demonstrated in the form of enlarged lymph nodes. The important thing to realize is that this anemia is usually indicative of definite activity of the Hodgkin's process, and it is substantiaed now from the work of Ross[9] that a hemolytic factor is present in this particular disease that can be depressed only by suppression of activity of the disease process itself. Consqeuently, the use of nitrogen mustard for continued anemia alone would seem rational. Its use of alleviation and control of the intense pruritus that these people suffer is warranted inasmuch as at least half the patients so afflicted obtain relief. The actual administration of nitrogen mustard is greatly benefited nowadays by the administration of Thorazine previous to the intravenously administered nitrogen mustard. My own experience favors intramuscular use of Thorazine, usually 50 mgms, an hour or so before the nitrogen mustard and repeated every six hours. Another aid that seems favorable, although its concomitant use with nitrogen mustard has been limited in my hands, is propane hydrochloride given orally in the form of 120 mgm tablets. This drug has been of definite benefit in the control of radiation sickness resulting from routine x-ray treatment, but it has not been available to me long enough for extensive use in connection with nitrogen mustard administration.

The other chemotherapeutic compound is tri-ethylenemelamine, usually referred to as TEM. Although it may be used intervenously in the amounts of two or three mgms the usually accepted administration is oral, inasmuch as toxicity is low. This drug is useful in disseminated forms of the disease, particularly so when the patient may be fairly well off constitutionally and exhibits clinical signs of active disease. A daily dose of 2.5 mgm for four consecutive days is the standard at the present time. Gellhorn[4] stresses the importance of administering sodium bicarbonate (2 gms.) with each dose of TEM to insure an alkaline medium. With the addition of sodium bicarbonate the dose may be stepped up to 5 mgms daily and the whole course administered thusly in two days or continued to a 3 x 5 mg.[5] He reports one death from apparent reactivated pulmonary tuberculosis in their series, however, and warns against the use of the drug in a known victim of tuberculosis.

The patient with advanced Hodgkin's disease who is in a state of pancytopenia and has a hypocellular marrow makes the use of x-ray therapy or nitrogen mustard hazardous. It is possible to obtain some benefit from Cortisone and 50 to 200 mgms a day may lessen pain, reduce fever, and produce an improved sense of well being temporarily. Usually there is no notable regression of nodes or masses. At this state of the disease the question of hypersplenism may arise with the thought of splenectomy, and some patients have been handled in this manner. The over-all results, however, are poor.

Conclusions

What then, do we have to offer the patient with Hodgkin's disease in this current year of 1956. Do we have a cure for the disease? No. It has been concluded by individuals with far greater experience than I[2] that a 20 year remission is necessary to prognosticate as to a cure in this disease and we have too few of these. Have we lengthened the survival rate? It is doubtful. A detailed study of 254 cases seen and treated at the University of California Hospital from 1914-1951[12] brings out the striking observation that of 103 patients treated prior to 1940, 44.7 per cent were alive at three years and 29.1 per cent at five years; of 112 treated 1940-1948, 55.4 per cent were alive at three years and 27.7 per cent at five years. These figures would indicate no improvement whatever in survival rates; but, when reports from the literature on 433 patients before 1940 are compared with similar reports on a total of 1109 patients treated since 1940 there is a rise from 15 per cent five year survival to 26.6 per cent five year survival for the latter group (ibid). However, it is pointed out that there is no group of patients with Hodgkin's disease of sufficient num-

ber who have had no treatment, that could serve as comparison, in order to make the figures statistically significant.

What then has been accomplished in the treatment of this disease? It can be said without qualification that these patients can be made vastly more comfortable and can be directed into an effective life rather than one of invalidism during the greater part of their life span. The emphasis in therapy is on palliation, but not just relief of pain, and on preventing complications. The future possibilities of chemotherapy seem most promising.

Summary

The diagnosis and etiology of Hodgkin's disease are discussed in general terms.

The therapeautic measures in use for this disease are outlined and recommendations made for their use.

The present day accomplishments in the clinical management of Hodgkin's disease are outlined.

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Clinical Pathologic Conference

HOWARD C. HOPPS, M.D. and WILEY T. McCOLLUM, M.D.

Doctor Hopps: We have considerable information as to this patient's history, physical findings, laboratory data and hospital course. Our problem today is to determine not only the nature of this patient's disease and the precipitating cause of death, but also to elucidate the etiology and pathogenesis. Doctor McCollum, an internist with special interests in the cardiovascular system, is with us to discuss the clinical aspects of this case. The information at his disposal is exactly that which you have all received.

THE AUTHORS

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Protocol

Patient: W.B.C., 50 year while male (grocery clerk). Died 25 days after fourth and last hospital admission.

The patient was first admitted to University Hospitals approximately 20 months before his death, referred by the Vocational Rehabilitation Division, for evaluation of possible pulmonary disease. A previous diagnosis of rheumatic heart disease with mitral stenosis had been made. At the time of first admission the chief complaint was heart trouble. There had been a history of migratory polyarthritis at the age of 12 years, lasting approximately two months and disappearing without residual effects. Four more bouts of polyarthritis occurred at four to five year intervals with decreasing severity each time. Two years prior to this *first admission*, during the winter, there was a sixth attack of migratory arthritis involving feet, ankles, hands and wrists. For the first time the patient was troubled with exertional dyspnea and orthopnea. He was treated with digitalis by his local physician

and improved. Approximately six months before the *first hospital* admission he had "virus pneumonia," following which exertional dyspnea and orthopnea reappeared. He developed also a chronic productive cough, worse in the early morning upon arising; occasionally the patient noticed blood tinged sputum. One month before *first admission* a film of his chest was interpreted to show mitral configuration of the heart, pleural effusion, left, and pleuro-pericardial adhesions, left. Sedimentation rate at that time was reported as 30 mm/hr. *Review of systems* (first admission) revealed failing vision for the past fifteen years. The patient's teeth had been extracted 20 years before. He had had considerable sinus trouble and nasal polyps had been resected on several occasions. During the past two years there had been nocturia, 2—5 times. *Physical examination* (first admission) revealed a heart within normal size but with diffuse PMI. Rate and rhythm were regular. There was described a grade II pre-systolic rough murmur, heart over the apex and a short friction rub, most marked at height of inspiration, heart best 3-4 cm. above the cardiac apex. Pulse was 88; blood pressure was 110/80. There was silghtly decreased resonance over the left lung base and a few medium moist rales heard over both apeces. On this *first admission* the urinalysis was essentially negative, hemoglobin was 12.3 gm. per cent, and RBC's 4.14/cu.mm. WBC's were 14,800/cu.mm. with 66 per cent neutrophils and 12 stab forms. Sedimentation rate was 17 mm./hr. Blood Wasserman was negative. Chest film showed the heart to be within normal limits of size. Fluoroscopy revealed paradoxical movement of the left dome of the diaphragm. The left costophrenic angle was obliterated. The left border of the heart was prominent from enlargement of the left atrium. There was also a slight posterior displacement of the esophagus. Bronchogram revealed normal configuration of the basilar bronchi of the left and right lungs; however, the anterior segment of the left lower lobe did not fill. An electrocardiogram revealed partial heart block, occasional ventricular extrasystoles, primary T-wave changes characteristic of digitalis effect, and suggestive evidence of low grade left ventricular hyperthophy. Two sputum samples were negative for acid-fast bacilli. Because of varicosities of the right leg (20 years) a right saphenous ligation was done. The patient was discharged improved, to be followed in the Out patient Clinic.

Approximately one month later the patient was re-admitted to the hospital. On this *second admission* it was learned that the patient had continued to have exertional dyspea and a productive cough, usually precipitated by a change in position. In addition, he complained of occasional orthopnea, tachycardia and palpitations, with a feeling of fullness in the region of the costal margins bilaterally. Pulse was 84, respirations 24, blood pressure 110/75 and temperature was normal. Physical findings on this *second admission* revealed dullness to percussion over the left lateral and posterior lung fields from the level of the 7-8 ribs. There were scattered rales throughout both lung fields. PMI was in the sixth intercostal space in the nipple line and was diffuse. The grade II presystolic murmur heard previously was now transmitted into the axilla and "over the pericardium." The abdomen was described as negative. Blood count and urine analysis were not remarkable. Chest films revealed that the heart appeared to be increasing in size, although the left border could not be visualized. There was homogenous veiling of the lower half of the left lung field. The right costophrenic angle and lung were relatively clear. A liter of serosanguinous fluid was removed from the left pleural cavity. Its specific gravity was 1.015 and protein 2.7 per cent. Cell count was: 919 RBC's, 144 lymphocytes, 135 polys. There was no growth upon culture and no acid-fast organisms were seen. Cytologic examination did not reveal neoplastic cells. Vital capacity was done and stated to be 97 per cent of normal. A number of sputum examinations were negative for acid-fast organisms. The patient improved under bed rest, low sodium (500 mg.) diet and digitalis and, after three weeks, was discharged, much improved. Approximately three and one-half months later the patient was *admitted for the third time* stating that, following his discharge from the hospital, he had an episode of hemoptysis lasting about a week. He stated that he would cough from a teaspoon to one-half cup

bright red blood. He had noticed no hemoptysis for the past three months. Other than this he felt he had done well except for gradually increasing dyspnea and orthopnea. There had been slight palpitation, tachycardia and occasional pedal edema. On the *third admission* temperature was normal, pulse 88, respirations 18 and blood pressure 120/80. In the chest there were diminished to absent breath sounds, diminished tactile fremitus and dullness to percussion, all over the left middle and posterior portions. There were moist and bubbling rales over the left lower lobe. The right lung field was clear. The PMI was in the 6th intercostal space in the left midclavicular line. Rate and rhythm were regular. There now was a grade IV "low, rumbling, rough murmur heard throughout diastole." In addition, there was a grade II systolic blowing crescendo murmur heard over the right precordium. The liver was palpable two fingerbreadths below the right costal margin in the midclavicular line; it was slightly teder. There were no other abnormal masses. Rectal examination was negative (as before). Neurologic examination was essentially negative. Urinalysis and blood count were essentially normal. On this *third admission* chest films showed further increase in size of heart shadow with fluid obliterating the left costophrenic angle. The hilar shadows appeared considerably accentuated as compared with previous films. Two GI series revealed only questionable downward displacement of the splenic flexure of the colon (radiologist stated that spleen was palpable two fingerbreadths below the costal margin and tender). Barium enema revealed only considerable downward displacement of the splenic flexure, probably from the enlarged spleen. Electrocardiogram disclosed auricular fibrillation, primary T-wave changes characteristic of digitalis effect and heart in semi-vertical position. Shortly following this *third admission* approximately 2300 ml. of straw colored fluid was removed from the left chest. Cytologic studies revealed cells with appearance suggesting malignancy. After the thoracentesis the patient had pain upon deep breathing located in the base of the left chest and over an area of the spleen, but this went away after several days. The patient was discharged after five weeks, considerably improved.

After an interval of two and one-half months the patient was *readmitted* for the *fourth and last time* complaining of swelling of ankle joints, elbows, knees and wrists for two weeks and a "breaking out" on arms and legs for one week. The migratory polyarthritis was painful and involved joints were hot, as well as swollen. Approximately a week after this had begun, the patient developed a "red rash" which affected both upper and lower extremities. His local physician gave him tablets of vitamin K and there was slight improvement. One week before this hospital admission, his local physician withdrew pinkish fluid from his left chest, amount not stated.

Physical Examination: (Fourth admission) T. 98.8°; P. 84; R. 20; BP 118/80. The patient was well developed but poorly nourished and apparently acutely ill. Expansion was slightly diminished in the left side of the chest and there was dullness to percussion in the left lateral aspect, up to the sixth rib, extending posteriorly. Breath sounds and vocal fremitus were diminished over this area of dullness. A few fine moist rales were heard in the right base posteriorly. The cardiac border extended to the midclavicular line in the sixth intercostal space. A grade II soft systolic murmur was heard in the apex; no other murmurs were heard. Extrasystoles were present approximately each 6-7 beats. The second pulmonic sound was described as slapping in character. The abdomen was not remarkable except that the liver margin extended two fingerbreadths below the costal margin. A "petechial type" rash was seen over both arms extending up to the elbows and also over both lower extremities. There were ecchymotic areas below the knees. Both wrists were swollen and the metacarpophalangeal joints were involved. The right elbow was slightly swollen but not tender. Both knees were slightly swollen and slightly tender. Ankles were moderately swollen, slightly red and hot. There was 1+ pitting edema of both lower extremities.

Laboratory Data: Hematocrit was 42, Hb. 14.2 gm. per cent and RBC's 4.23. Sedimentation rate was 23 (36-29 during the next two weeks). WBC's numbered 16,050 with 83 per cent neutrophils, 1 eosinophil, 11

lymphocytes and 5 per cent monocytes. Platelets were 299,300; bleeding time was 1′ 14″ and coagulation time 1′. Clotretraction began within 30′ and was complete in two hours. Prothrombin time with whole plasma was 19.8″, with 12.5 per cent plasma dilution, 51″. Urinalysis revealed sp. gr. 1.013. There was no protein or sugar. A few WBC's were observed. Uric acid was 2.67 mg. per cent. Wassermann test was a negative. Examination of three sputum specimens was negative for acid-fast organisms. A stool specimen was negative for ova, parasites and blood. A Congo red test was performed and 65 per cent of the dye was retained at one hour. Five blood cultures, taken at one hour intervals, were negative. X-rays revealed a markedly increased cardiac silhouette with the same configuration described previously. There was further increase in bronchovascular markings. A moderate amount of fluid was seen in the left chest and a small amount in the right chest. Three weeks later a portable chest film revealed little change. It was stated that "we can't exclude a superimposed pneumonia on top of this pulmonary congestion."

Clinical Course: Two attempts at thoracentesis, left, were unsuccessful. The patient was given aminophylline and acetylsalicylic acid. The next day he complained of nausea. He developed more ecchymotic areas on the dorsum of the right leg. His dyspnea was slightly decreased. He developed diarrhea, 5-6 semi-solid stools. One of these "looked like tar;" however, stool analysis the next day was negative for blood. Tincture of belladonna was begun. Rectal examination was done and reported as negative. The patient seemed to be improving but was continuing to develop new petechial hemorrhages. On the sixth hospital day a biopsy was taken from the gingival margin, thinking that this might present evidence of "collagen disease." Pathologic report was—non-specific inflammatory reaction, chronic, low-grade. On the eighth hospital day venous pressure was determined at 190 mm. H_2O; arm to tongue circulation time (decholin) 34″; arm to lung (ether) 15″. On the eighth hospital day the patient was placed on the critical list—no reason is recorded in the progress notes. On the ninth hospital day there were several episodes of hemoptysis—to one-half cup. Patient was receiving oxygen. On the eleventh hospital day aureomycin was begun to "possibly combat secondary infection in this apparently neoplastic process." A transfusion of 500 ml. blood was given. The patient began to be disoriented. A series of cytologic studies on the sputum were summarized and it was stated that "a few atypical cells were noted, but essentially negative findings." The patient became progressively worse, lethargic and reponded poorly. Fresh petechiae and purpuric areas were noted. On the 13th hospital day the patient improved and petechial hemorrhages began to fade. However, he was incontinent of urine and feces. The last recorded progress note is "patient still somewhat disoriented. Still has decubitus. Patient on hykinone, 1 ampule daily and 1 cc. vitamin B_{12} and vitamins. Believe progress is slowly downhill." Accord to nurse's notes, the patient was found dead by the nurse on the following day (1:30 a.m.)

Throughout the entire four periods of hospitalization the patient's temperature was essentially normal. Shortly before the patient died the intern summarized the clinical diagnoses which were most strongly considered, in this order:

1. Tuberculosis—polyserositis, constrictive pericarditis.
2. Lymphosarcoma
3. Periarteritis nodosa
4. Lupus erythematosus
5. Henoch's purpura
6. Virus myocarditis
7. Acute exacerbation of rheumatic fever
8. Carcinoma

Clinical Diagnosis

Doctor McCollum: Since you have all had opportunity to study this excellent history I shall merely summarize some of the points which I considered most important. The patient died 25 days after his fourth and last hospital admission. He had been coming to University Hospitals off and on for the past 20 months. There had been a diagnosis of rheumatic heart disease with mitral stenosis and, at the time of his first admission, the history revealed an attack of migratory polyarthritis at the age of 12 years which had lasted for two months. He had four similar bouts over the next four or five years. Two years prior to his first admission to this hospital he described a sixth attack. At the

time of his first admission he had begun having exertional dyspnea and orthopnea. Prior to this first admission he gave a history of "virus pneumonia," which is something that we must take with a grain of salt. Then he developed a productive cough, streaked with blood. A chest x-ray taken at this time was interpreted as showing mitral configuration of the heart. A sedimentation rate was reported as 30 mm./hr. Physical examination on first admission to the hospital revealed a grade II presystolic rough murmur. There was decreased resonance over the left lung base and at this time the patient had a 14,000 white count with a relatively normal red count. Fluoroscopy revealed enlargement of the left atrium and an electrocardiogram at that time doesn't help us too much because it showed digitalis effect; his partial A-V heart block could have been due either to digitalis or to an acute exacerbation of rheumatic fever. Later the patient began noticing episodes of palpitation which you must interpret as best you can from this history. A more detailed description might have allowed us to differentiate between auricular fibrillation, paroxysmal tachycardia, episodes of extrasystole, etc. At this time there was a diffuse PMI and the grade II presystolic murmur heard previously was now transmitted to the axilla and over the percordium. A liter of fluid removed from the chest was serosanguinous, had a specific gravity of 1.015, and a protein content of 2.7 per cent.

Upon the patient's third admission, he was coughing up blood and had pedal edema. Examination at this time revealed a grade IV murmur. Then we note a statement that the radiologist palpated the spleen. I think that is significant. The electrocardiogram now revealed auricular fibrillation, so in regard to the patient's previous statement of palpitations, he was probably referring to auricular fibrillation. Another acute episode of migratory painful polyarthritis with swelling and redness precipitated the patient's fourth admission. He stated that this had begun about two weeks previously and that a week previously he had noted a red rash. Physical examination on this final admission revealed a slapping secondary pulmonary sound (which might be in keeping with increased pulmonary pressure), a petechial rash, and swollen wrists; the metacaral phalangeal joints were also involved. Both knees were slighly swollen. At this time the hemoglobin and red count were about the same. Sedimentation rates were 23, 36, and 29 (Wintrobe). He still had 16,000 white cells with 83 per cent neutrophils. The Congo red test, which might be significant with an illness of this duration, was well within normal limits. Five blood cultures taken at hourly intervals were also negative. The chest contained quite a bit more fluid. Pertinent findings of the clinical course include elevation of the venous pressure, prolongation of the arm to lung and arm to tongue circulation times, and an episode of central nervous system involvement during the last few days of his life.

With a history as specific as this, I think we would be corerct in making a positive diagnosis of *rheumatic heart disease with mitral stenosis*, with cardiac hypertrophy, especially of the left, atricular fibrillation, and congestive failure. I suspect that there was an acute exacerbation of rheumatic fever too. The pericardial (or pericardiopleural) friction rub heard on one of the hospital admissions could be explained on this basis. Now, to get down to the terminal illness, I believe that in a case of this sort, where a definite diastolic murmur develops rather suddenly, late in the course, is strongly indicative of subacute bacterial endocarditis—especially if other substantiating signs are present. That happened on this patient's third admission. With petechiae and leukocytosis, in a patient with rheumatic heart disease who develops a new murmur (diastolic) in the course of his disease, I must assume *bacterial endocarditis* asma diagnosis. The negative blood cultures are somewhat against this as is also the patient's afebrile course. However, we don't know what his temperature was all the time he was out of the hospital. We do know that he had a persistent leukocytosis. With the assumption of bacterial endocarditis the patient would probably have emboli going to the lungs and possibly emboli to the brain, which would explain the terminal episode of incontinence and disorientation, etc. Emboli to the spleen would account for the abdominal pain which lasted for four or five days and subsided spontaneously. Emboli could

also have gone to the liver, kidneys, etc. Ordinarily we would have expected evidence of this in hematuria and some degree of proteinuria, but this was not found. A second possibility, but much less likely, would be *carcinoma of the lung* with metastasis to the brain, etc. This could certainly explain hemoptysis, but I believe the history dating this long is much against this consideration. Furthermore we would expect to find more radiologic changes, particularly on the last x-ray. In final summary I believe that the patient had rheumatic heart disease, probably active, with superimposed bacterial endocarditis and embolic phenomena.

General Discussion

Q. What is the significance of paralysis of the left diaphragm?

Dr. McCollum: I don't know. That was noted on first admission, 20 months before the patient's death. Paradoxical motion of the diaphragm is not necessarily due to involvement of the phrenic nerve. Occasionally we see it in patients without demonstrable disease and we are not able to account for it.

Anatomic Diagnosis

Dr. Hopps: As you can see from the protocol, a number of diagnoses were considered during the patient's course. At the time of death this patient was quite malnourished. Petechial hemorrhages which had been described clinically were still evident. It was our impression that some of these were very recent and that this purpuric process was an active one—there were ecchymotic areas as well as petechial hemorrhages. *The abdominal cavity* was essentially dry, and there were no adhesions. The liver extended 2 cm. down below the costal margin in the right midclavicular line. Other organs were essentially normal to cursory inspection. The right *pleural cavity* contained 1100 ml. of blood stained serous fluid. There were fibrous basilar adhesions on the right side. On the left side the pleural cavity was almost oblitered by the fibrous adhesions except for an area in the lateral aspect of the lower lobe where 600 ml. of fluid were pocketed. The *pericardial sac* was the site of extensive filmy fibrous adhesions obliterating approximately three-fourths of the cavity. This was *not* constrictive pericarditis. The *heart* weighed 700 gm. empty of blood. There was moderate dilatation of the ventricles and very marked dilatation of the left atrium. Average diameter of the left atrium was three or four times normal, which would mean that its volume was increased 20 or more times. The pulmonic valve was not particularly altered; the tricuspid valve presented nodular fibrous thickening at the line of closure characteristic of rheumatic involvement. This was probably not of much functional significance. The mitral valve was markedly altered. It was tremendously thickened as the result of nodular fibrous and calcific masses, some of which were as large as 1 cm. in diameter. The commissures were fused principally as a result of adherent matted chordae tendineae reducing the valve to a slit 1.5 cm. long with a maximum width of 0.4 cm. The cusps were rigid, presenting a fixed orifice and producing a high grade stenosis and insufficiency. As a result of this the left atrium was markedly dilated and markedly hypertrophied. In some areas the left atrium was a thick as 1 cm. (just posterior to the origin of the aorta). The left atrium contained a large ball thrombus 7.5 x 6 x 4 cm. This had been there for some time, since it was partially decolorized and since it was rather friable. It apparently originated in the auricle (auricular appendage), but only in one small area—just above the anterior cusp of the mitral valve. It extended directly over this valve orifice and it may have been a precipitating factor in this patient's death. Such ball thrombi can be exceedingly dangerous in that if they impinge upon or get jammed down a narrowed valve orifice they produce sudden death. Such atrial ball thrombi usually develop in the presence of a stenotic valve orifice, as in this case. The left atrium presented rather striking changes characteristic of rheumatic fever, particularly in MacCallum's area (that area over the posterior mitral cusp). Here there was thickening of the endocardium and striae of increased opacity and grayish-white discoloration were seen there. In the right atrium the aricular portion contained a thrombus too, but this one was small and projected into the atrial cavity for but a little way. I mention these because they are both important sources of thrombotic emboli; the

ball thrombus is important as a possible basis for sudden death. The aortic valve too had rheumatic stigmata, but these again were minimal and of little functional significance. The *lungs* were strikingly involved. Each weighed approximately 1200 gm., three times normal. Almost the entire lower lobes appeared to be infarcted. The infarction was not as a single massive one but rather numerous small ones which had become confluent. No thrombotic emboli were demonstrated in pulmonary arteries. The *liver* exhibited chronic passive congestion. The *kidneys* exhibited only evidence of chronic passive congestion grossly.

Microscopic sections in this case are of most interest and they disclose something that we had not suspected grossly. In addition to the expected sequellae of old rheumatic pancarditis there was minimally active rheumatic fever. Most striking, however, was the marked rheumatic pulmonary arteritis. This phenomenon was first described about 30 years ago. Coombs in 1908 described rheumatic arteritis of the coronary arteries. A most excellent review and summary of the problem was presented by Von Glohn and Pappenheimer in 1926. They cited a number of cases, pointing out the changes that occurred and describing their peculiar characteristics, one of which is an accumulation of fibrin immediately under the intima in many of these pulmonic arteries, just as we were able to see here. This process, although it may involve many tissues, is sometimes almost limited to the lungs. I believe the case we have today is a case of rheumatic fever with extensive involvement of the heart (minimally active) but with a more profound and significant effect on the lungs, involving particularly the small pulmonic arteries. Rheumatic pneumonitis has been pretty generally accepted as an entity now and there are elements of rheumatic pneumonitis in this case, in addition to the peculiar arteritis. The patient's petechiae and ecchymoses are probably manifestitations of primary vascular purpura which may occur in rheumatic fever. There were no significant changes in the spleen that would account for this, although there was chronic passive congestion. The patient's bone marrow, although it does give some evidence of toxic depression, still presents many megakaryocytes, so there was no primary failure there.

Now to reconstruct the process by which death occurred in this case, here is a man with rheumatic fever over a long period of time involving his heart in a fairly characteristic manner, producing high grade mitral stenosis and insufficiency. High grade mitral stenosis is the condition most predisposing to a ball thrombus in the left atrium because of eddy currents that result from the valvular defect. At the time this was developing I believe that the patient had rheumatic arteritis and that this progressed to a most unusual degree in the lungs, leading to numerous small infarcts, so many that they became almost confluent. The patient had chronic passive congestion of the lungs and probably had also a low grade bronchopneumonia or bronchitis, so that in the areas of infarction bacteria began to grow and the infarcts became septic. As these processes continued there was an increasing load placed on the right heart. The precipitating cause of death is hard to ascertain, it may have been the increasing work load on the damaged heart—from the progressively narrowing pulmonary circulatory bed. On the other hand, death may have been precipitated by the ball thrombus which was building up more and more, becoming impinged upon the narrowed mitral orifice.

Our final pathologic diagnosis was:

1. Rheumatic fever with:
   a) Pancarditis, minimally active with involvement of aortic and tricuspid valves, slight, and mitral valved, marked, producing high grade stenosis and insufficiency of the latter, with slight ventricular hypertrophy and dilatation, and marked hypertrophy and dilatation of left atrium, and with fibrous pericarditis, extensive (non-constrictive)
   b) Rheumatic arteritis involving principally pulmonary arteries and arterioles with multiple (numerous) infarcts, some secondarily infected
   c) Fibrous pleuritis, focal, right; extensive, left
   d) Hydrothorax, marked, right and left
   e) Ball thrombus of left atrium, large
   f) Thrombosis of right auricle (auricular appendage)
   g) Embolic glomerulonephritis, slight
   h) Chronic passive congestion of thoracic and abdominal viscera
   i) Purpura

PRESIDENT'S LETTER



Although somewhat bothered, belabored, and at times bewildered, I do not feel this Thanksgiving should pass unnoticed. It might be well to remember the colorful history of America, the numerous vicissitudes and dangers our predecessors faced. We have very little of the pathos and problems which confronted them daily. In this skeptical and hard-boiled age, one is apt to suspect the heroes of this land as being too good to be true, and had we been on location at any particular date, this country would have fared better. I wonder how historians will record the deeds of this confused decade.

In the face of seeming indifference of the rest of the world, only an egotist can go on believing he has a role to play in the passing drama, but our profession, socially and politically, has the good fortune of being in a position to exert a beneficial effect upon the citizenry of our communities and nation, and, rest assured, human nature and the personal contact will always cut across and will always defeat the tightest government regulations.

The majority of us are comfortably housed and clothed and, alas, too many are overweight. Our lives are not a humdrum existence, as each new patient presents a completely new problem to be solved and opens up an avenue for a long and lasting friendship.

For the first time, we have the means to implement good feelings, the means of instant world-wide communication, the means of quick getting-together, the means of recreating a storm-ruined town almost overnight, of eliminating poverty, of healing not only a body but a whole life.

Believing these things to be true, it will be difficult to convince me that we are not eating cephalad to that piece of the turkey which goes over the fence last!

Tom McClure M.D.

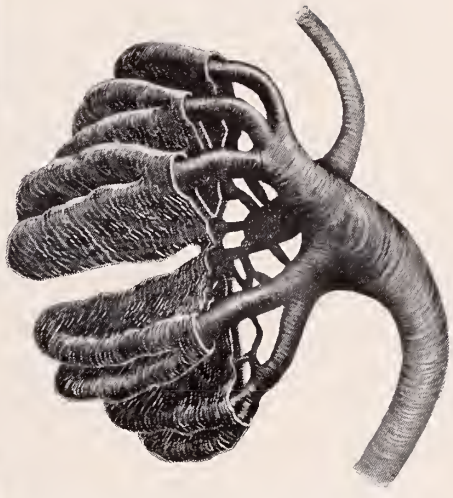
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(illustration by Hans Elias)

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SEARLE

Poison Information Center Releases Report

H. A. Shoemaker, Ph.D., Director of the Oklahoma Poison Information Center in Oklahoma City, recently revealed figures concerning the center's operation for its first six month period. The center was established at the University of Oklahoma School of Medicine last April in an effort to contribute to the prevention of accidental poisoning and to improve the treatment of poisoning when it does occur.

A breakdown of reported cases during the periods April 16, 1956 through October 15, 1956 is given below:

Telephone Calls

	Adult	Child
April	2	2
May	1	7
June	3	7
July	13	19
August	9	18
September	2	17
October	1	10
	—	—
Totals	31	80
Total		111

Reports by Mail

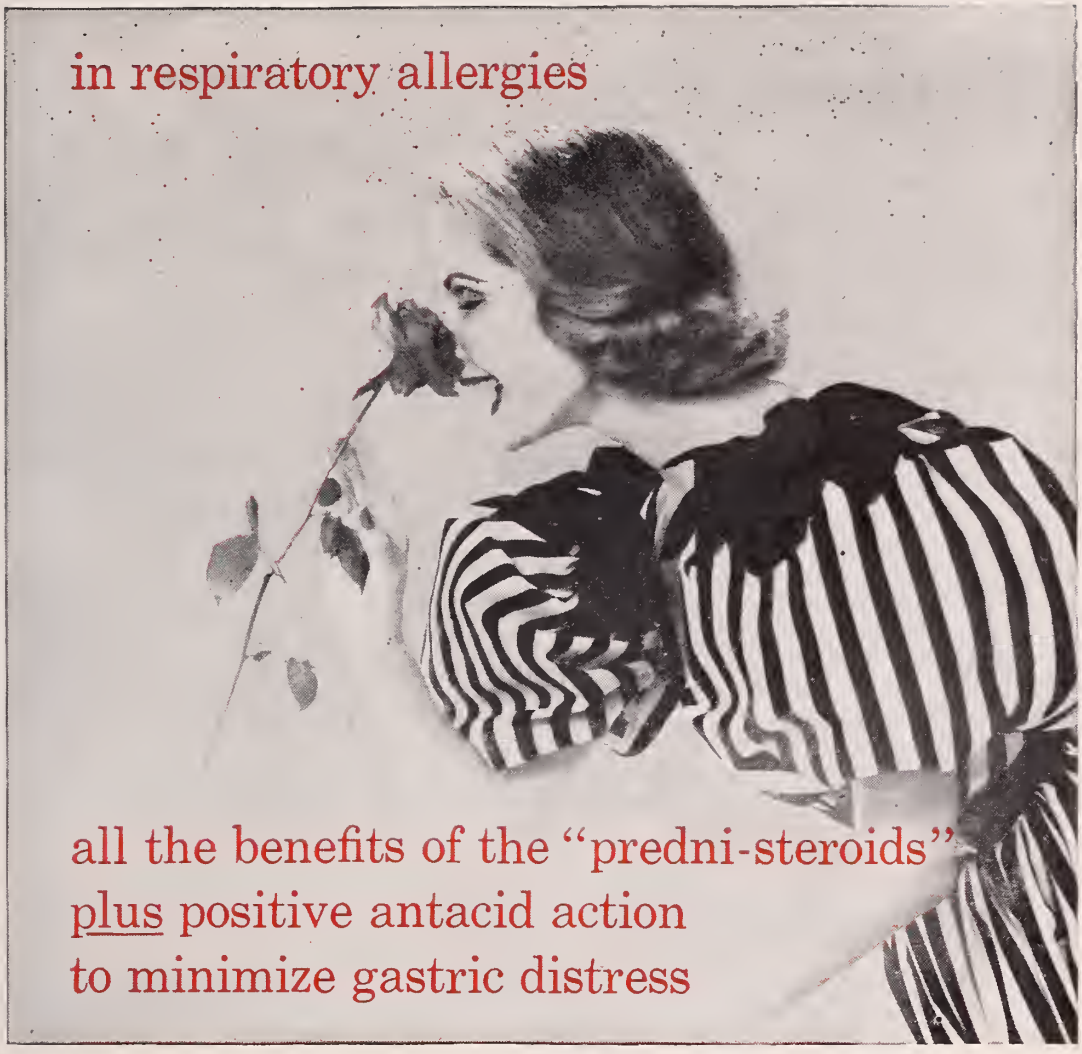
	Adult	Child
April	(Letter with report card not sent to physicians until June	
May	28, (1956)	
June	2	5
July	11	16
August	1	3
September	2	4
October	0	2
	—	—
Totals	16	30
Total		46
Grand Totals	48	110
Less Duplicates	4	5
	—	—
	44	105
Net Total		149

Substances About Which Calls and Reports Were Received by the Oklahoma Poison Information Center

Abano Bath Oil Capsule
Acetylsalicylic Acid
Anacin Tablets
Arsenate of Lead
Arsenic
555 Liquid Rat & Ant Poison (Arsenic)
Arsenic Roach Poison
Avon Astringent
Avon Cologne
Barbital
Benzedrine
Berlou Moth Spray
Bird of Paradise Seeds
Boric Acid
Boxer's Liquid Plastic cement
Bruce's Cleaning Wax
Calamine Lotion
Calgonite
Camellient Lotion
Camphor-phenique
Castor Oil
Chlorine Gas
Chromium Metal Cleaner
Clorox
Codeine in Histadyl E. C. Syrup
Copper Sulfate
D-Con
DDT
Detergent
Diaperene Lotion
Dieldrin Insecticide Spray
Dilantin Sodium
Diphtheria & Tetanus Toxoids
Drano
Dyane-Shine Shoe Polish
Easy-off Oven Cleaner
Emulsion of Benzyl Benzoate & Lindane
Energine
Ephedrine
Equanil
Fly Bait (Parathion)
Frenquel
Gasoline
Granules Ant Poison (Chlordane)
Green Lizard Lotion
Household Ammonia
Ink
Insecticide (Pyrethrins, Terpene Polychlorinates, Piperonyl Butoxide)
6-12 Insect Repellent
6-12 Insect Repellent Stick
Isopropyl alcohol
Jimson Weed Seeds
Johnson's Pride Furniture Polish
Kerosene
Larvex Moth Proof
Laundry Cleaning Fluid
Lighter Fluid
Liquid Rat Poison
Lysol
Marezine
Meratran
Mercuric Chloride
Mimosa seeds
Moth ball
Mum
Mushroom
Naptha Cleaning Fluid
N, Butyl Chloride
Nestle's Cold Wave for Children
Nestle's Color Rinse
No-Doz Tablets
O'Cedar Furniture Polish
Old English Scratch Remover Furniture Polish
Otodyne
Parathion
Paste Rat Poison
Pepto Bismol
Pine Sol
Potassium Pemanganate Tablets
Poison Ivy
Poke Berries
Potassium Iodide
Purex
Pyridium
Real Kill Bug Killer
Rit (red)
Roux Hair Dye
Sargent Worm Capsules
Screw Worm Remedy
Seconal
Silver Cleaner
Sodium Chlorate
Sodium Cyanide
Spic and Span
Strychnine
Surfadyl
Tablets Phenobarbital & Belladonna
Tat Ant Trap
Thiominol
Thorazine
Thum
Tire Dressing
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No. 135 Western Targets (clay pigeons)
Wizard pink wick deodorizer
Zinc Fumes

The center was organized with the endorsement and cooperation of the State Medical Association and the State Health Department. Incoming calls from physicians are received on a 24 hour basis and all are encouraged to take advantage of the extensive information which is available on the handling of poisoning cases. The center may

in respiratory allergies



all the benefits of the "predni-steroids"
plus positive antacid action
to minimize gastric distress

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2.5 mg. or 5 mg. prednisone or prednisolone with 50 mg. magnesium trisilicate and 300 mg. aluminum hydroxide gel.

Clinical evidence[1,2,3] indicates that to augment the therapeutic advantages of prednisone and prednisolone, antacids should be *routinely* co-administered to minimize gastric distress.

References: 1. Boland, E. W., *J.A.M.A.* **160**:613 (February 25) 1956. 2. Margolis, H. M. *et al.*, *J.A.M.A.* **158**:454 (June 11) 1955. 3. Bollet, A. J. *et al.*, *J.A.M.A.* **158**:459 (June 11) 1955.

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Good Nutrition and Endocrine Functioning

Maintenance of homeostasis attuned to health devolves upon good nutrition and normal functioning of the enzyme and endocrine systems.[1,2,3] Conversely, by impairing vital activities of the endocrines, poor nutrition can seriously disturb production of hormones needed to regulate metabolic processes.

Intense and prolonged deficiency in essential nutrients and food energy depresses pituitary, gonadal, and other endocrine activity, leading to subnormal physiologic states. Clinical studies exposing male volunteer subjects to a semistarvation diet produced symptoms resembling those of various endocrine dysfunctions.[4] Since the pituitary and other hormones are protein in nature, it appears logical to assume that protein nutrition plays an important part in their synthesis.[5]

Meat, by supplying valuable amounts of high quality protein, B vitamins, essential minerals, and fat containing unsaturated fatty acids, contributes importantly to any role that good nutrition may play in the maintenance of the endocrines, their functioning, and the production of hormones.

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The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

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"Home Remedy" or Professional Service?

Few families today rely on home remedies when illness strikes. And that's as it should be . . . the treatment of the sick and injured should be left to the men and women who have dedicated their lives to the medical profession and the scientific treatment of the sick and injured.

However, when it comes to another important field of service to mankind—estate planning—it is unfortunate that many doctors still rely on the "home remedy." Instead of consulting those who are dedicated to estate planning, they leave the handling of their estates to well-meaning but untrained and inexperienced relatives or friends, or simply use the "home remedy" themselves.

According to an article in the American Medical Association letter of October 18, 1955:

"Only one doctor in eight survives his wife."

"One out of three physicians left no will."

"Expenses of settlement of the estates studied ranged from a minimum of 13% to as much as one-third of the total estate."

Don't delay another day, Doctor! For the sake of your family's welfare, let our Trust Department discuss with you immediately the urgent matter of the transfer of your estate in the event of your death. Call REgent 6-1531 now and ask for our Mr. Scott. He'll be happy to call on you at your convenience.



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Fund Campaign Revealed For Medical Research Foundation

Hugh G. Payne, Executive officer of the Medical Research Foundation recently announced that physicians of Oklahoma, who nine years ago provided the first funds leading to the establishment of the Oklahoma Medical Research Foundation, are again "campaigning," setting the stage for a statewide drive planned for the coming year of 1957.

The same format which produced sufficient funds to start the Foundation is being followed again. A team of two physicians, plus a layman, is formed and visits the physicians in another area of the state.

Mr. Payne stated, "From the reports we get, it's evident that the physicians enjoy themselves, visiting with old friends and getting a 'break' from practice, and they certainly help the cause of the Foundation, both by their pledges, and by the leadership they show to the business people in their cities."

Members of the Oklahoma City Underwriters Association took on the project of serving as lay aides, and have been excellent partners on the physician calls. Mr. Payne declared, "The combination of physicians and insurancemen seems ideal—we're getting the story told, and told well, and the Foundation management and research staff is most grateful to them for their service."

So far, 249 physicians in 33 counties have pledged $61,000 over a three year period.

Evans Talley, M.D., Enid is serving as State chairman for the project, with John R. Taylor, M.D., Kingfisher as the chairman for Western Oklahoma in friendly competition with Carl Bailey, M.D., Stroud, the Eastern Oklahoma chairman.

Tulsa and Oklahoma county physicians will be contacted during this month and assignments in the remaining counties will be made during the remainder of this year.

Physicians who have already made trips on their colleagues for the Foundation include:

Evans E. Talley and L. R Kirby, Enid; Harle V. Barrett and R. B. Gibson, Ponca City; Ned Burleson and John Rollins, Prague; Floyd Moorman, William K. Ishmael, M. M. Appleton, E. Goldfain, Earl McBride, Robert M. Bird, Robert A. Schneider, C. M. Harvey, Turner Bynum, Arthur E. Schmidt and William H. Reiff, all of Oklahoma City;

Logan A. Spann and Wendell Smith from Tulsa; A. B. Smith, Stillwater; C. A. Traverse, Alva; F. C. Buffington and Carl T. Steen, Norman; George F. Brown, Claude E. Lively and Sam Dakil, McAlester; Curtis B. Cunningham, Clinton; Charles E. Martin, Perry; R. R. Hannas, Jr., Sentinel.

And J. W. Baxter, Shawnee; Phillip Joseph, Sapulpa; Carl Bailey, Stroud; Ollie McBride, Ada; Charles Cunningham, Poteau; Wallace Byrd, Coalgate; and Frank W. Clark, Ardmore.

A.M.A. Launches Survey

The American Medical Association has launched a study to learn what the hospital patient gets for his money.

It will be the second phase of a three-part, five-year study measuring the medical services given to the American people by their physicians. The survey, which will cost about $100,000 when completed, is the first of its kind — measuring services and not money spent.

The results, which will be published late in 1958, may help bring about changes in hospital construction, medical education, health insurance rates, and other health care matters.

Questionnaires were mailed to 7,000 hospitals to learn the age, sex, length of stay, and diagnoses for every hospitalized person discharged during the third week of October.

In the first phase conducted in 1953, the AMA Bureau of Medical Economic Research determined the age and sex of hospital patients on a given day, and found that men were more hospitalized than women, even though one out of six beds was used for a maternity case. The final phase will be conducted next spring when physicians will contribute information about patients seen in the office and at home.

The current questionnaire will help answer such questions as: Which ailments or conditions are sending most Americans to hospitals, how many beds are taken up by accident casualties and by patients undergoing non-emergency surgery, etc.

Former Foundation Chemist To Head Colorado Research Institute

Max N. Huffman, Ph.D., former head of the Organic Chemistry section of the Oklahoma Medical Research Foundation and Professor of Biochemistry at the University of Oklahoma School of Medicine, has been appointed to direct a new Research center in Colorado.

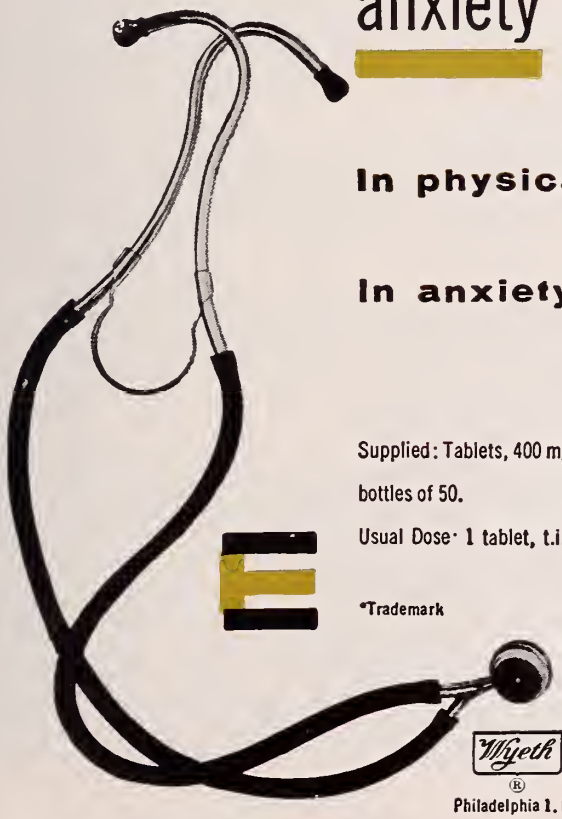
The extensive medical research center will be created in the city of Boulder, by the Lasdon Foundation, Yonkers, New York and will be known as the "Lasdon Foundation Research Institute of Chemotherapy."

The institute will have facilities for both basic research in medicinal chemistry and for pilot plant production for clinical studies. It will conduct research in the fields of cancer, atherosclerosis, arthritis, mental diseases, hypertension, viral and fungal diseases and the stimulation of the reticuloendothelial system.

According to William S. Lasdon, president of the 10-year old non-profit Lasdon Foundation, the new center will be completed by June of 1957. It will be centered in a large modern building containing the most advanced scientific equipment available. Doctor Huffman is now recruiting a staff of top research people. Doctor Huffman was Professor of biochemistry at Southwestern Medical College prior to his going to the Oklahoma Medical Research Foundation in 1950. As a student of Professor Edward A. Doisy, Nobel Laureate in Medicine, he was a member of the research team that first isolated the ovarian sex hormone, estradiol, from the human organism.

Starting his career as a teacher in a tiny, one-room country school in Douglas County, Missouri, Doctor Huffman received his bachelor degree in chemistry from the University of Missouri and his doctorate in biochemistry from St. Louis University in 1941. He was a National Research Fellow in Biochemistry at Columbia University and later became director of research of U. S. Standard Products Company.

A member of numerous scientific and scholarly societies, Doctor Huffman has been Visiting Professor of Organic Chemistry at the Baylor University Graduate Research Institute and is a Fellow of the American Association for the Advancement of Science.



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In anxiety...

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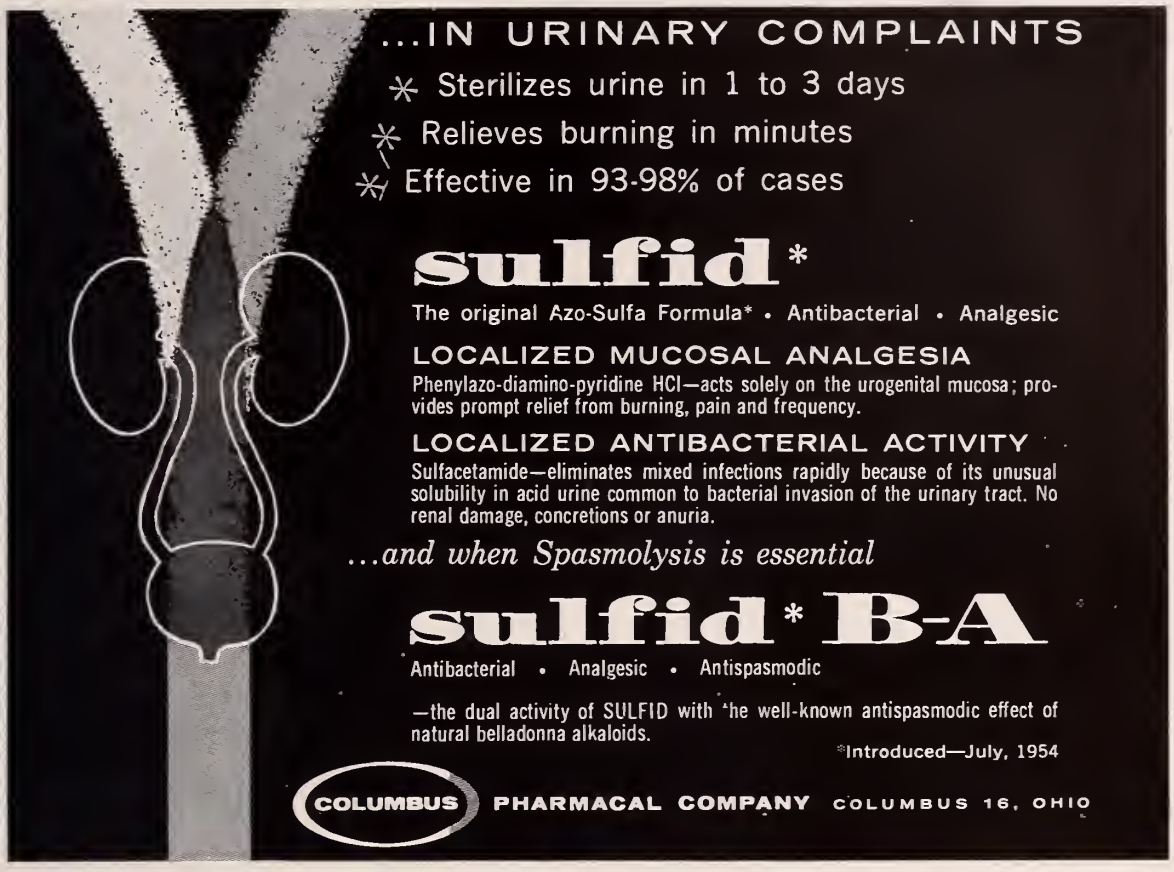
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Uniform Chemical Labeling Law Proposed

The American Medical Association's Board of Trustees has authorized a first step toward protecting the public from potentially dangerous household and commercial chemicals.

The Board authorized the AMA committee on toxicology to draft a recommended "model" law on labeling of many possibly harmful chemicals not now regulated.

It would serve as a guide for writing regulations which require labels to show such information as the product's contents, its possible dangers, directions for safe use, and first aid instructions.

Products involved include auto care and repair materials, paints and paint removers, putty, soldering fluids, household cleansers and polishers, heating and cooking fuels, laundering items, art supplies, and toys containing chemical.

The committee's secretary, Bernard E. Conley, estimates there are at least a quarter of a million different trade-name substances now on the market. Without proper labeling, physicians and the public cannot possibly know what harmful material they may contain or how to treat poisoning from them.

The proposed law is intended to reduce careless and ignorant handling and storage of chemicals in the home, in small businesses and in other areas where control of exposure to the chemicals is not as efficient as it is in the manufacturing process, Conley said.

The law should be an "enabling act" under which later regulations could spell out necessary details for enforcement and compliance, according to Torald Sollmann, M.D., Cleveland, committee chairman. The legislation should be flexible and not readily out of date.

The AMA committee plans to consult other organizations and individuals who are interested in the problem. These include the American Academy of Pediatrics, American Public Health Association, American Pharmaceutical Association, National Safety Council, leading trade associations, and various state and national government regulatory agencies.

Pioneer Physician Retires

O. W. Rice, M.D., 84 year old pioneer physician has closed his office in the Hub building in McAlester and retired from his profession.

Doctor Rice was born November 21, 1871 on a farm in Johnson county, Missouri.

After graduating from the Rush Medical college, University of Chicago, in June, 1897 followed by a year of practice in his home town in Missouri, he set up his office at Canadian.

In the fall of 1904 Doctor Rice moved to Alderson and formed a partnership with the late F. L. Watson, M.D. Together they were surgeons for the Rock Island railroad and the McAlester Coal mining company, serving the latter until the company closed its mines.

In 1923 the Rice family moved to McAlester where he has continued his practice ever since.

Doctor Rice is a member of the first medical society in his area, and has been a member of the county, state and national medical societies, serving twice as president of the county society.

ARTIFICIAL LIMB WEARERS

Honger Limbs are being successfully worn by amputees of oll ages. David Canfield, just 13 months *(illustrated)*, is one of the many young children growing up on Honger Legs. In controst, Captoin W. T. Traylor, over 75 *(illustrated)*, now wears his fifth Hanger. He is o fire inspector who must cover continuolly hospitols, schools, sports events, etc., and be on his feet for hours ot o time.

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The success of Honger Limbs with omputees af such widely vorying types can be largely ottributed to custom monufocture and individual fitting. Unusual conditions are carefully investigated by experienced fitters, ond limbs ore monufoctured to meet individuol requirements. The experience of Hanger's 90 years is given to every omputee so that his rehabilitotion moy be successful.

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BRACES ARCH SUPPORTS TRUSSES

Infant Eye Disease Related To Length of Time in Oxygen

Three Detroit researchers, V. Everett Kinsey, Ph.D., and June Twomey Jacobus, B.A., of the Kresge Eye Institute, Detroit, and F. M. Hemphill, Ph.D., of the School of Public Health, University of Michigan, Ann Arbor, recently announced that premature infants should be given additional oxygen only in emergencies and then for as brief periods of time as possible.

They based their recommendation on a recent study which showed that length of exposure to oxygen is the important factor in producing retrolental fibroplasia, a serious eye disease which may result in blindness. This differs from earlier studies indicating that the concentration of oxygen was the causative factor.

Retrolental fibroplasia was first recognized as a disease of premature infants in 1942 and is now the major cause of blindness among children. Oxygen administration to premature infants was implicated as a possible cause in 1952.

However. because the disease appeared to occur haphazardly and because no information was available on death rates due to curtailing oxygen for premature infants, doctors have been reluctant to change their routine of oxygen administration.

The Detroit researchers report that restricting oxygen not only lessens the chances of retrolental fibroplasia. but also appears to have no effect on an infant's chances for survival.

In last month's issue of the "Archives of Ophthalmology," published by the American Medical Association which is based on a cooperative study made in 18 hospitals between July 1, 1953, and June 30, 1954, attempted to clear up questions about oxygen's effect on RLF and mortality rates.

Of the 786 premature infants born in or brought to the 18 hospitals during the year, 586 were followed for at least two and a half months. Fifty-three infants were given oxygen for 28 days, the standard procedure at the time. The other 533 infants were given oxygen only when breathing difficulty occurred.

The study showed that on a percentage basis, twice as many infants in the routine-oxygen group developed the early active stages of the disease as did infants in the curtailed-oxygen group. The rate of progression to the later scarring (cicatricial) stages which produce permanent damage to the eyes was three and a half times greater in the routine-oxygen group than in the curtailed-oxygen group.

The rate for both active and cicatricial stages increased as the duration of exposure to oxygen increased, but was not affected by the concentration. Rate of withdrawal from oxygen did not appear to play a role.

The incidence was much greater in infants of multiple birth (twins or triplets) than of single birth. The researchers said the reason for this is unknown, but it may be related to the degree of oxygen saturation in the blood. A multiple-birth infant might have less oxygen in his blood before birth than a single-birth baby. When he is given additional oxygen, a relatively greater difference in blood-oxygen saturation before and after birth could result, which might be "a greater insult" to the blood vessels of the eye.

This study was supported by grants from the National Institute for Neurological Diseases and Blindness of the U.S. Public Health Service, Bethesda, Md., the National Foundation for Eye Research, Boston, and the National Society for the Prevention of Blindness, New York.

HAVE YOU HEARD?

S. D. BARNES, M.D. and J. G. CASEY, M.D. have jointly opened up a new doctors' clinic at 117 North Second Street in Hollis, Okla.

M. JOE CROSTHWAIT, M.D. and GUY W. FULLER, M.D. of the Crosthwait-Fuller Clinic, Del City, Okla., had recently had their grand opening. The clinic has been open and taking care of patients since July 20.

PAUL C. GALLAHER, M.D., Shawnee and J. F. SIMONS, M.D., Alva, were recently presented a Certificate of Appreciation for 10 years of loyal and faithful service by the Selective Service System.

C. E. NORTHCUTT, M.D., physician and surgeon of Ponca City has been added to the board of directors of the Oklahoma Alcoholism association.

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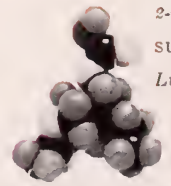
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No. (CM3706R)

Oklahoma County Proposes Resolution Condemning VA Hospital Policies

A resolution condemning certain policies of the Will Rogers Veterans Administration Hospital of Oklahoma City was proposed during a recent meeting of the Oklahoma County Medical Society. This action came after the conclusion of a program concerning the activities of the Veteran's Administration.

Charles Beasley, M.D., Veterans Administration Area Medical Director from St. Louis, spoke to the group on the operation of V.A. hospitals in his area. Milton B. Davis, M.D., Dallas, Secretary of the National Veterans Medical Society, also addressed the group, pointing out his organizations' stand on various problems concerning the policies of veterans medical care.

Following their presentations, both physicians participated in a panel discussion along with John F. Burton, M.D., O.S.M.A. Delegate to the American Medical Association and Mark Everett, Ph.D., Dean of the University of Oklahoma Medical School. The panel was moderated by Henry G. Bennett, M.D., Oklahoma City physician.

The resolution submitted for consideration read as follows:

WHEREAS, the Members of the Oklahoma County Medical Society as citizens and taxpayers have become more aware of the ever increasing tax burden,

AND WHEREAS, the members of the Oklahoma County Medical Society constantly see money appropriated for the care of veterans with service connected illness and the indigent veterans with non-service connected illnesses being used for the care of veterans who are able to pay for medical and hospital care,

AND WHEREAS, through the policy of the Will Rogers Veterans Hospital of Oklahoma City, doctors are forced to do ghost surgery and have fees split. These practices are severely condemned by the Code of Ethics of the American Medical Association and the American College of Surgeons,

AND WHEREAS, the Will Rogers Veterans Hospital is collecting fees for medical, surgical, and hospital services rendered to patients covered by Workmen's Compensation Liability and private sick and accident insurance,

AND WHEREAS, the Oklahoma County and State Medical Societies in May 1956, and the American Medical Association one year ago, through resolutions condemned these practices of the Will Rogers Hospital,

AND WHEREAS, the Deans Committee for the Veterans Administration Hospital has been ineffective in curbing these abuses and violations of the Veterans Care Act,

We, the members of the Oklahoma County Medical Society, feeling our responsibility as citizens and taxpayers, do hereby resolve to withdraw from all further participation in the care of paying cases at Will Rogers Hospital and all further care of the "non-service connected" illness patients able to pay for care. We further resolve we will be happy to continue our care of the veterans with service connected illness and the truly indigent veteran.

BE IT RESOLVED, that the Will Rogers Veterans Hospital be given sixty days to correct their flagrant violations of the Veterans Care Act and to the ethical principles of medical practice to the satisfaction of the Oklahoma County Medical Society.

BE IT FURTHER RESOLVED, that further participation in the present program by members of the Oklahoma County Medical Society will be considered unethical and appropriate action of the Oklahoma County Medical Society will be taken against such members which may lead to suspension.

Elmer Ridgeway, M.D., President of the Oklahoma County Medical Society referred the resolution to the Resolutions Committee for further study. It will be presented to the Society at their November 27 meeting for final consideration.

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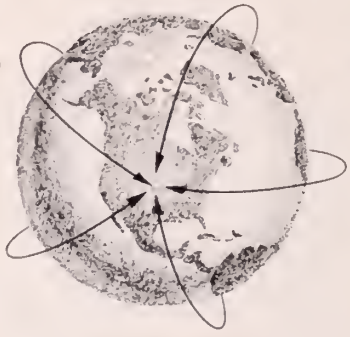
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[1]Posner, A. C., *et al.;* Further Observations on the Use of Tetracycline Hydrochloride in Prophylaxis and Treatment of Obstetric Infections, *Antibiotics Annual* 1954-55, pp. 594-598.

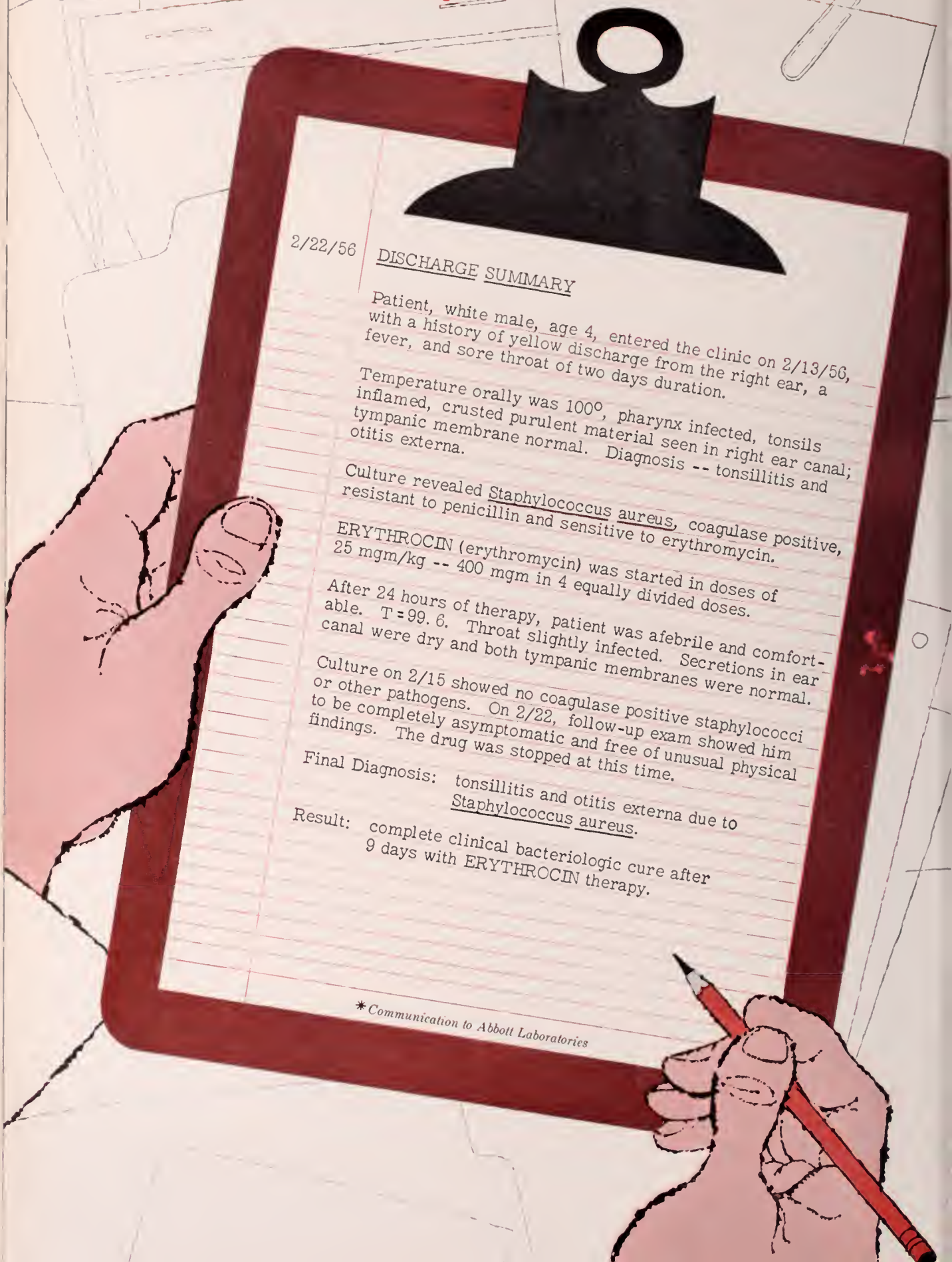
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Erythrocin in treating tonsillitis and otitis externa*



2/22/56

DISCHARGE SUMMARY

Patient, white male, age 4, entered the clinic on 2/13/56, with a history of yellow discharge from the right ear, a fever, and sore throat of two days duration.

Temperature orally was 100°, pharynx infected, tonsils inflamed, crusted purulent material seen in right ear canal; tympanic membrane normal. Diagnosis -- tonsillitis and otitis externa.

Culture revealed Staphylococcus aureus, coagulase positive, resistant to penicillin and sensitive to erythromycin.

ERYTHROCIN (erythromycin) was started in doses of 25 mgm/kg -- 400 mgm in 4 equally divided doses.

After 24 hours of therapy, patient was afebrile and comfortable. T = 99.6. Throat slightly infected. Secretions in ear canal were dry and both tympanic membranes were normal.

Culture on 2/15 showed no coagulase positive staphylococci or other pathogens. On 2/22, follow-up exam showed him to be completely asymptomatic and free of unusual physical findings. The drug was stopped at this time.

Final Diagnosis: tonsillitis and otitis externa due to Staphylococcus aureus.

Result: complete clinical bacteriologic cure after 9 days with ERYTHROCIN therapy.

*Communication to Abbott Laboratories

"clinical response good or excellent"

In one recent study, 18 patients with acute follicular tonsillitis and septic sore throat were given erythromycin. Infecting organism was *Str. pyogenes*. The investigator stated, "*In all 18, the clinical response could be regarded as either good or excellent.*"[1]

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1. Herrell, W. E., Erythromycin, Antibiotic Monographs, No. 1, p. 29, New York, Medical Encyclopedia, Inc., 1955.
Idem p. 30.

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Southwestern Medical Meeting Held October 10 in Lawton

Physicians of southwestern Oklahoma met in Lawton on October 10 at a meeting sponsored by the Comanche-Cotton County Medical Society. The one day meeting featured a scientific session at the Hotel Lawtonian and an evening dinner honoring H. M. McClure, M.D., President of the OSMA, as well as several social activities.

Approximately 60 physicians attended the afternoon scientific session. Those who appeared on the program were: Robert H. Bayley, M.D., William K. Ishmael, M.D., and John F. Kuhn, M.D., all of Oklahoma City.

Social events of the day included golfing for the physicians, sponsored by Pfizer Laboratories, and a style show for the ladies with the Comanche-Cotton County Woman's Auxiliary acting as hostesses. At the conclusion of the scientific portion of the meeting Pfizer entertained again with an hors d'oeuvre party at the Lawton Country Club for the physicians and their wives.

McClure Speaks

H. M. McClure, Chickasha, President of the state organization, who was a special guest at the dinner meeting was also the principal speaker on the program.

Before addressing the group, Doctor McClure paid homage to E. B. Dunlap, M.D., Lawton, for his fifty years in the practice of medicine. Doctor Dunlap was presented with a pin and accepted to membership in the "50 Year Club" of the Oklahoma State Medical Association.

In his talk, Doctor McClure reminded the physicians to "treat the patient along with the disease." He pointed out that in recent years many complaints were being heard from patients that could very easily be stopped by paying more attention to that aspect of the practice of medicine. He encouraged the physicians to also take a more active interest in the affairs of organized medicine as well as their individual practices, stating that, " . . . if we continue to treat patients as we have in the past, paying very little attention to their mental welfare; if we continue to devote little time to our community affairs and schools; if we continue to do nothing for the State organization; then, gentlemen, we will have some sort of governmental medicine. You are calling the shots!

"For several years," Doctor McClure concluded, "I have been worried—worried that the Philosophy which was instilled into me as a growing youngster was all wrong. I began to wonder if honor, integrity, and the belief that I was to help the fellow who was struggling, was all wrong. I guess we have all been scared during the past 20 years, and like all scared people we were greedy; we had to know everything; what we did not know we faked. We shunned understanding. Perhaps because understanding is a relationship and requires you to give as much as you take, and we had so little to give. We were the takers, the realists, the materialists —the empty ones who stuffed themselves with things and money and facts and figures. Nobody valued wonder and awe—and they were 'out-grown' things like tenderness and love—but I believe I can detect a slow change in the Philosophy of the individual. Now, one by one, we are returning from that flight to the land of 'gimme security' and 'I'll get mine.' Humbled, some of us, no longer demanding certainty as if it were a human right. Beginning once more to put the puzzle together, hoping that this time we shall not leave out the human being and his relationship with himself, as we almost did before."

At the conclusion of Doctor McClure's talk, Frank H. Austin, M.D., President of the Comanche-Cotton County Society adjourned the meeting. Doctor Austin and William A. Matthey, M.D., Secretary of the society, handled the arrangements for this function.

The meeting was also attended by Mr. Dick Graham and Mr. Don Blair of the Executive office of the State Association and Mr. Carl Behle of Blue Cross-Blue Shield in Tulsa.

Former Research Director Speaks

Edward C. Reifenstein, Jr., M.D. of New York City and former director of the Oklahoma Medical Research Foundation was guest speaker at the first fall meeting of the Tulsa Academy of General Practice held at the Hotel Tulsa.

Physicians Subject to Regular Draft

The Defense Department recently announced that when the special doctor draft expires next July 1, physicians and other professional personnel covered by it still will be subject, up to 35, to the regular draft. To discuss procedures to meet military needs after that date, the Defense Department has started conferences with representatives of groups involved, including the American Medical Association, American Dental Association, the Association of American Medical Colleges and the four surgeons general—Army, Navy, Air Force and U. S. Public Health Service.

The discussions were initiated by Frank B. Barry, M.D., assistant secretary of defense for health and medical matters, who is responsible for advising Secretary Wilson on the policy regarding procurement of medical personnel.

One of the questions is whether any change in the basic Selective Service act will be necessary to facilitate the selective call-up of certain physicians and other specialists—including scientists, who are deferred for educational and occupational reasons. This is the present situation: Although all physicians registered under the regular draft technically are liable for service up to age 35, few if any of those over 30 are apt to be called, as Defense Department estimates that the majority of its needs can be met by recent graduates of medical schools.

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The March of Medicine

Television's first medical network series, "The March of Medicine," will pioneer again when it presents the first nationwide program in color on a medical subject over the NBC-TV network. It is scheduled for Tuesday, November 27, at 8:30 p.m., and will fill the spot usually occupied by Armstrong Circle Theatre. The program called MONGANGA is a one-hour report on missionary medicine and is produced and sponsored by Smith, Kline & French Laboratories in cooperation with the American Medical Association.

"Monganga" will chronicle the life work of Doctor John E. Ross, who, for the past six years, has served as a mission doctor for the Disciples of Christ in Lotumbe, a remote village in the African Belgian Congo. John Gunther, noted author of the best-seller, "Inside Africa," will be the principal commentator on the program.

A native of California, and a graduate of the Indiana School of Medicine, Doctor Ross has devoted his life to bringing the benefits of modern medicine to the remote tribes of the Belgian Congo. "The March of Medicine" has recorded on film countless natives arriving at the mission station at Lotumbe to seek the aid of "Monganga"—the white doctor. Leprosy, yaws, elephantiasis, sleeping sickness, and arthritis are some of the more common diseases treated by Doctor Ross. When not at the operating table or administering drugs to these patients, he finds time to build new quarters for incoming patients and their families, make trips to distant bush clinics, and train a native staff of assistants, lecture to expectant mothers, and answer the demands of a nearby leprosarium.

This will be the twenty-second program in this documentary series. The first program in "The March of Medicine" series opened the doors of the annual American Medical Association meeting to the public for the first time in June, 1952. Since that time, it has documented such topics as arthritis, heart disease, cancer, mental illness, and various surgical techniques, to mention only a few. For this outstanding medical reporting, the series received the first Albert Lasker Medical Journalism Award given in the field of television.

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- maintains anacidity for hours
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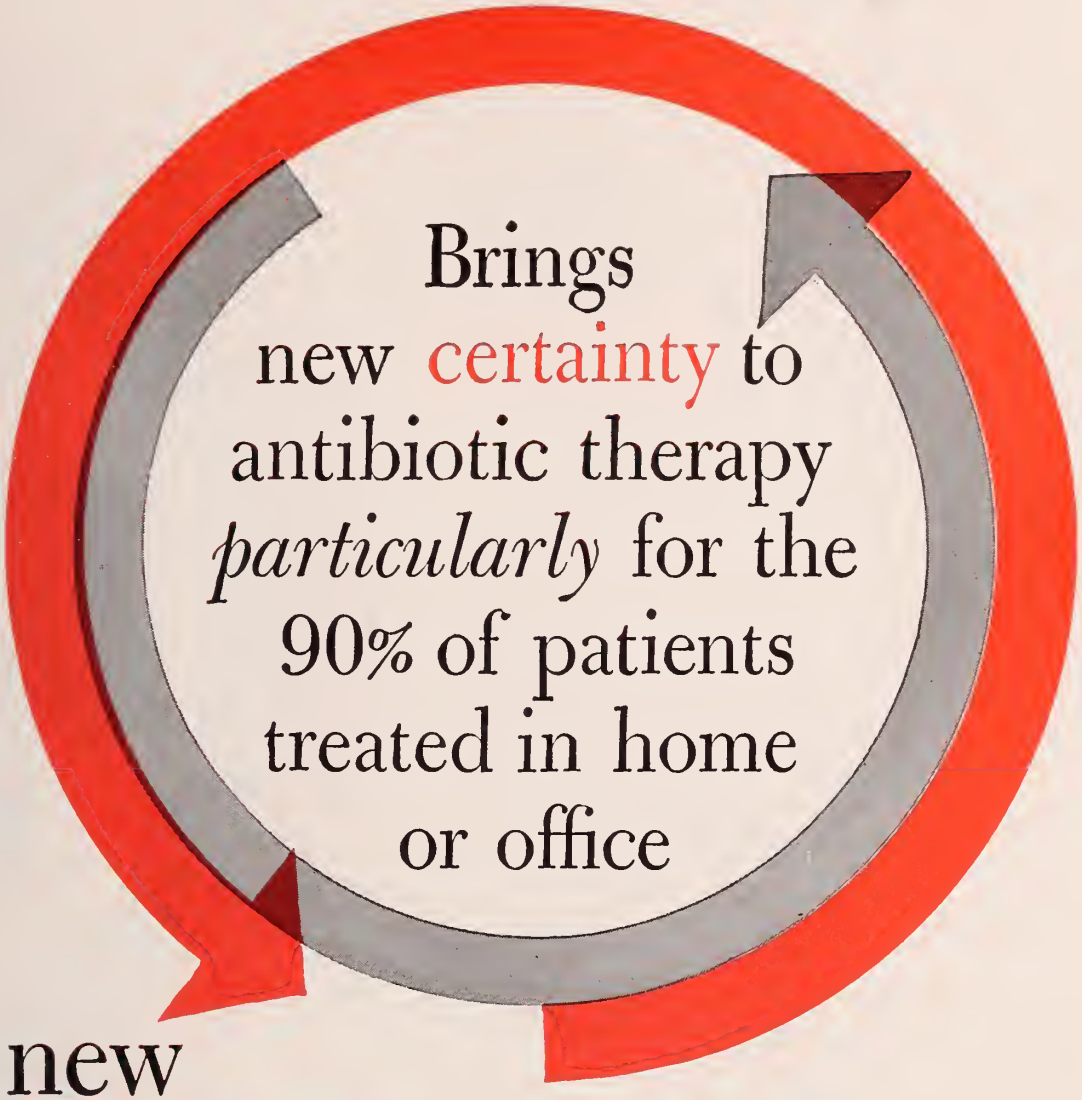
MONODRAL with MEBARAL—the "psychovisceral stabilizer"—provides for patients with ulcer and gastro-intestinal spasm an effective barrier against the impact of environmental stimuli . . . controls gastric hypersecretion and hypermotility for three and one half to five hours.*

EACH TABLET CONTAINS:
MONODRAL bromide..... 5 mg.
MEBARAL.....32 mg.

DOSAGE: 1 or 2 tablets three or four times daily.
Available on prescription only.
Bottles of 100 tablets.

Winthrop Laboratories New York 18, N. Y.

Monodral (brand of penthienate) and Mebaral (brand of mephobarbital), trademarks reg. U. S. Pat. Off.
*References and clinical trial supplies available on request.



new

Sigmamycin*

OLEANDOMYCIN TETRACYCLINE

*TRADEMARK

a new maximum
in therapeutic
effectiveness

a new maximum
in protection
against
resistance

a new maximum
in safety and
toleration

multi-spectrum
synergistically
strengthened...



Sigma

OLEANDOMYCIN TETRACYCLINE

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mycin*

a new certainty

in antibiotic therapy, particularly for the 90% of patients treated at home and in the office

Superior control of infectious diseases thraugh superiar cantrol of the changing micrabial papulotion is naw available in a new farmulotion af tetracycline, autstanding brood-spectrum antibiotic, with oleondamycin, Pfizer-discovered new ontimicrabial ogent which contrals resistant strains. The synergistic combination now brings to ontibiotic therapy: (1) o new fuller ontimicrobial spectrum which includes even "resistant" stophylocacci; (2) new superiar pratection ogoinst emergence of *new* resistant strains; (3) new superior sofety and toleration.

*TRADEMARK

Pfizer

superior control of infectious disease through superior control of the changing microbial population

new

Sigmamycin*

OLEANDOMYCIN TETRACYCLINE

A synergistically strengthened multi-spectrum antibiotic

Sigmamycin is a new antibiotic farmulatian praviding: (1) the unsurpassed broad-spectrum activity af tetracycline, the autstanding braad-spectrum antibiatic discavered and identified by Pfizer; (2) the actian af aleandomycin, the new antimicrobial agent which combats those strains, particularly among staphylocacci, naw resistant to tetracycline and other antibiatics.

Sigmamycin embadies a new concept in the use af antibiatics, far with this new synergistically active preparatian, the develapment af refractary pathagens and their emergence as impartant saurces af superinfectian are mare fully cantrolled.

New superior safety and toleration— Sigmamycin brings ta antibiatic therapy new superiar safety, new unexcelled taleratian because: (1) tetracycline, an autstandingly well-tolerated antibiatic, is farmulated with aleandamycin, alsa knawn to be remarkably free of adverse reactians; (2) the synergism between aleandamycin and tetracycline enhances antimicrabial patency.

Dosage: 1 ta 2 capsules q.i.d.

Supplied: Capsules, 250 mg. (oleandamycin 83 mg., tetracycline 167 mg.) Bottles af 16 and 100.

*TRADEMARK

Pfizer

PFIZER LABORATORIES, *Divisian, Chas. Pfizer & Co., Inc.*, Brooklyn 6, N. Y.

O.S.M.A. Honors Students

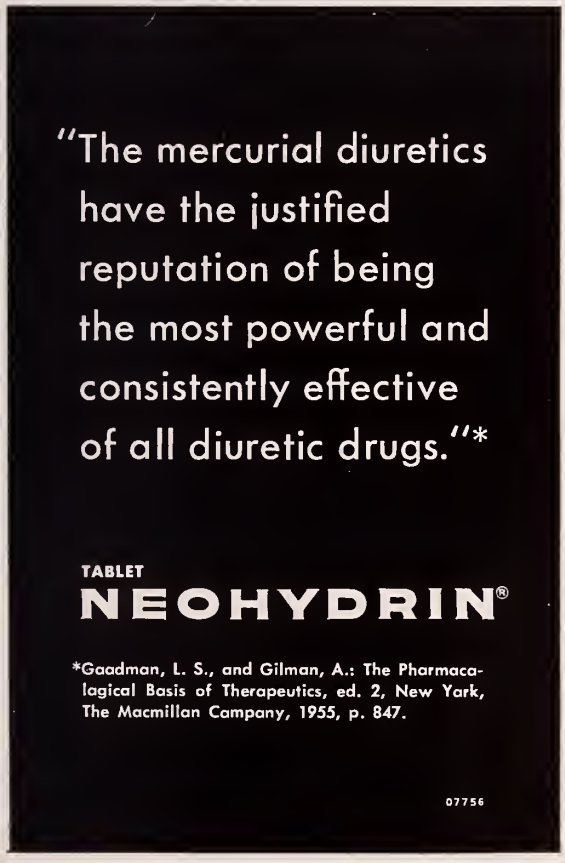
The annual dinner for the Student American Medical Association was given by the Oklahoma State Medical Association at Beverly's Hideaway, in Oklahoma City, October 6.

Approximately 200 students representing all classes at the Medical School attended.

H. M. McClure, M.D., President of the State Medical Association spoke to the students on "Your responsibility to your patients, family and community."

William Bernhard, President of the Student Association expressed his appreciation to the State Medical Association for the cooperation, interest and financial aid it has given them.

Other guests included: Carl Behle, Blue Shield representative from Tulsa; Don Blair, Associate Executive Secretary of the Oklahoma State Medical Association; R. Q. Goodwin, M.D., Past President of the State Medical Association; Jack Spears, Executive Secretary of the Tulsa County Medical Society and A. N. Taylor, Ph.D., Associate Dean of Student Affairs.



Ford Foundation Announces Medical School Grants

The Ford Foundation recently announced grants totaling $21,750,000 to strengthen instruction in the 44 privately-supported medical schools now in operation in the United States.

The grants are in the amount of $500,000 to each of 43 four-year institutions and $250,000 to the two-year medical school at Dartmouth College, Hanover, N.H. They were authorized by the Foundation's board of trustees upon the recommendations of a special advisory committee headed by Doctor Lee DuBridge, president of the California Institute of Technology.

The advisory committee was set up by the Foundation to develop plans for distributing $90,000,000 which the Foundation appropriated last December to aid the instructional programs of the private medical schools.

The grants are to be held by the recipient institutions as invested endowment for at least 10 years. During this time the income from the endowment may be expended for instructional purposes. Excluded from purposes of the grants are construction and research needs. After a 10 year period the medical schools will be free to use the principal sum as well as endowment income.

In announcing the grants the Foundation indicated it expects to disburse the balance of the $90,000,000 appropriation during the current academic year.

Institutions receiving the $500,000 grants are:

Albany Medical College of Union University, Albany, N.Y.; Baylor University College of Medicine, Houston, Tex.; Boston University School of Medicine, Boston, Mass.; Bowman Gray School of Medicine, Wake Forest College, Winston-Salem, N.C.; University of Buffalo School of Medicine, Buffalo, N.Y.; Chicago Medical School, Chicago, Ill.; University of Chicago School of Medicine, Chicago, Ill.; Columbia University College of Physicians and Surgeons, New York, N.Y.; Cornell University Medical College, New York, N.Y.; Creighton University School of Medicine, Omaha, Neb.; Duke University School of Medicine, Durham, N.C.; Albert Einstein College of Medicine, Yeshiva University, New York, N.Y.; Emory Univer-

sity School of Medicine, Emory University, Ga.

Georgetown University School of Medicine, Washington, D.C.; George Washington University School of Medicine, Washington, D.C.; Hahnemann Medical College, Philadelphia, Pa.; Harvard University Medical School, Boston, Mass.; Howard University College of Medicine, Washington, D.C.; Jefferson Medical College of Philadelphia, Philadelphia, Pa.; Johns Hopkins Medical School, Baltimore, Md.; University of Louisville School of Medicine, Louisville, Ky.; Marquette University School of Medicine, Milwaukee, Wisc.; College of Medical Evangelists School of Medicine, Los Angeles, Calif.; Meharry Medical College School of Medicine, Nashville, Tenn.; University of Miami School of Medicine, Coral Gables, Fla.; New York Medical College, New York, N.Y.; New York University College of Medicine, New York, N.Y.; Northwestern University Medical School, Chicago, Ill.

University of Pennsylvania School of Medicine, Philadelphia, Pa.; University of Pittsburgh School of Medicine, Pittsburgh, Pa.; University of Rochester School of Medicine and Dentistry, Rochester, N.Y.; St. Louis University School of Medicine, St. Louis, Mo.; University of Southern California School of Medicine, Los Angeles, Calif.; Stanford University School of Medicine, San Francisco, Calif.; Stritch School of Medicine of Loyola University, Chicago, Ill.; Temple University School of Medicine, Philadelphia, Pa.; Tufts University School of Medicine, Boston, Mass.; Tulane University School of Medicine, New Orleans, La.; Vanderbilt University School of Medicine, Nashville, Tenn.; Washington University School of Medicine, St. Louis, Mo.; Western Reserve University School of Medicine, Cleveland, Ohio; Woman's Medical College of Pennsylvania, Philadelphia, Pa.; Yale University School of Medicine, New Haven, Conn.

National Auxiliary Conference Held in Chicago

Mrs. Gordon Livingston, President of the State Woman's Auxiliary, Mrs. John Powers Wolff, President-elect and Mrs. George Garrison a member of the National Board of Directors represented Oklahoma at the Annual Fall Conference of the American Medical Association Woman's Auxiliary in the Drake Hotel in Chicago last month.

The theme of the Conference was, "Health is Our Greatest Heritage."

Featured speaker was Earnest B. Howard, M.D., Assistant Secretary of the American Medical Association who reviewed the Legislative and Federal Activities in Medicine.

Workshops were conducted by panels, and included topics on Public Relations, The Mental Health Problem, The American Medical Education Foundation, Safety and Civil Defense. Mrs. Livingston gave a report on the "Tulsa Civil Defense Project."

Oklahoma was in the spotlight several times during the meeting. Attention was brought upon the fact that Oklahoma was the first to sponsor a Junior Auxiliary for the Medical Students' wives in the United States. Mrs. Livingston and Mrs. Wolff were asked to explain how the group was organized and what the students themselves thought of the project as a whole. They explained how the Junior Auxiliary raises money by selling subscriptions to the AMA publication, *"Today's Health."* In this way they are making a valuable contribution to the promotion of this publication and at the same time strengthening their organization as well.

GYNECOLOGIC CYTOLOGY SERVICE

INTERPRETATION OF CERVICO-VAGINAL, ETC. (PAPANICOLAOU) SMEARS
FOR THE
DIAGNOSIS OF CARCINOMA

KITS (slides, spatulos, fixotive and mailing containers)
and
Instructions for Taking and Mailing Smears Furnished on Request

M. Wm. RUBENSTEIN, M.D.
Gyne-Cytology Laboratory
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Lysine plus vitamins

to help children eat more,

grow more!



INCREMIN combines the amino acid lysine with vitamins B_1, B_6 and B_{12}—essential nutrients that stimulate appetite, and promote more efficient utilization of protein. For children who are problem eaters, for the underweight, for the generally below-normal child—INCREMIN will usually produce a remarkable and prompt improvement!

Cherry flavor. Can be mixed with milk, milk formula, or other liquid. In 15 cc. polyethylene dropper bottle.

Dosage: 0.5 to 1 cc. (10-20 drops) daily. Each cc. (20 drops) contains:

l-Lysine HCl	300 mg.
Vitamin B_{12}	25 mcgm.
Thiamine HCl (B_1)	10 mg.
Pyridoxine HCl (B_6)	5 mg.
Alcohol	1%

Excellent for the elderly! INCREMIN serves equally well to stimulate lagging appetites in geriatric patients.

New

INCREMIN*

Lysine-Vitamin Drops

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*REG. U.S. PAT. OFF.

highly successful . .

- faster relief of pain, photophobia
- better control of inflammation, edema, allergy
- effective against common eye pathogens
- extremely well tolerated

now available

for inflammatory, allergic, infectious or traumatic eye conditions amenable to topical therapy—rapid, potent, topical Meti-steroid and anti-infective action

supplied: METIMYD Ophthalmic Suspension-*Sterile*: prednisolone acetate (METICORTELONE Acetate) 5 mg. per cc. (0.5%) suspended in an isotonic buffered and preserved solution of sulfacetamide sodium 100 mg. per cc. (10%), 5 cc. dropper bottle. METIMYD Ointment with Neomycin: each gram contains 5 mg. prednisolone acetate (METICORTELONE Acetate), 100 mg. sulfacetamide sodium and 2.5 mg. neomycin sulfate (equivalent to 1.75 mg. neomycin base); ⅛ oz. tube, boxes of 1 and 12.

METIMYD,* brand of prednisolone acetate and sulfacetamide sodium.
METICORTELONE,® brand of prednisolone.
*T.M.

MM-J-696

. in topical eye therapy



new

METIMYD*

(prednisolone acetate and sulfacetamide sodium)

Ophthalmic Suspension-Sterile

and

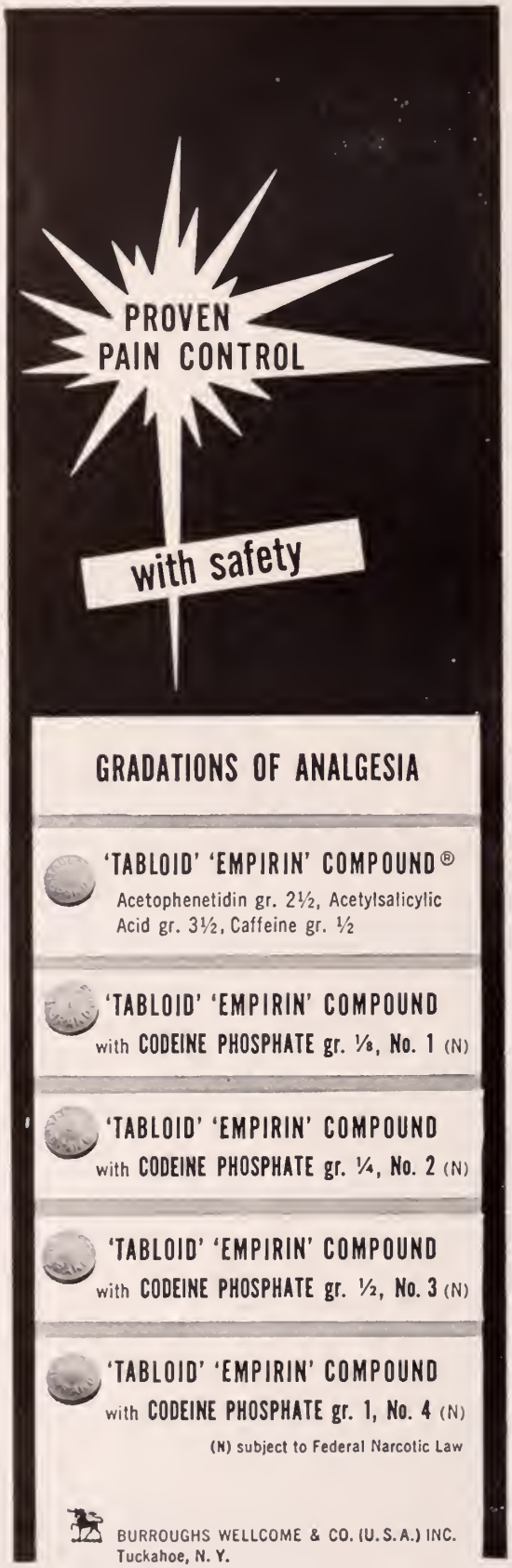
METIMYD

(prednisolone acetate and sulfacetamide sodium with neomycin sulfate)

Ointment with Neomycin

• antibacterial • antiallergic • anti-inflammatory

Schering



Tulsans Hear Noted Speaker

Israel Davidsohn, M.D., director of pathology at Mount Sinai hospital in Chicago recently addressed the monthly scientific meeting of the Tulsa County Medical Society. He spoke on "The Clinical Significance of Immunity."

Doctor Davidsohn, a native of Austria, was educated at the University of Vienna and the University of Berlin. He came to America in 1923 and became a naturalized citizen several years later.

He is also professor and chairman of the department of pathology at the University of Chicago medical school, is widely known for his research in immunology, hematology and blood groups. Doctor Davidsohn recently received the Morris H. Parker award for scientific research by the University of Chicago.

Speaker for this month's meeting will be J. Huber Wagner, M.D., chief surgeon of the United States Steel Corporation, Pittsburgh.

Tulsa Physician Displays Needlepoint

W. R. R. Loney, M.D. is now displaying his largest piece of needlepoint in the lobby of the National Bank of Tulsa. It is a 10,000 square inch rug which he started more than three years ago. The room-sized covering contains more than 490,000 stitches.

Tulsans are not the first to see this rug exhibited. It was first shown at the Doctor's Hobby Show in Oklahoma City last May. It was then sent to Chicago to be exhibited at the 19th annual American Physicians Art Association show during the national convention of the American Medical Association. Since that time it has also been shown in New York several times.

His first undertaking in needlepoint was a set of 12 dining room chairsets. Since then he has made countless purses, bellcords, oblongs and other pieces in needlepoint and petit point.

Doctor Loney first became interested in this hobby while on a fellowship in Rochester, Minnesota and strongly advocates a hobby for everyone, stating that, "The result, in terms of mental health and physical relaxation is worth far more than even the most exquisite finished product."

Southern Medical Association To Meet in Washington, D.C.

The Southern Medical Association, one of the world's largest medical organizations will convene for their 50th Annual Meeting at Washington's Sheraton-Park Hotel, November 12-15. More than 3,000 of the Southern Medical Association's 10,000 members are expected to attend this four day meeting.

According to Oscar B. Hunter, Jr., M.D., Washington physician and General Chairman of the Executive Committee, the Scientific Assembly will feature more than 300 papers, which includes 20 specialty sections.

"D.C. Day," will highlight the opening day activities which will be presented by members of the D.C. Society. The day's sessions will be opened by Ralph M. Caulk, M.D., President of the Medical Society of the District of Columbia.

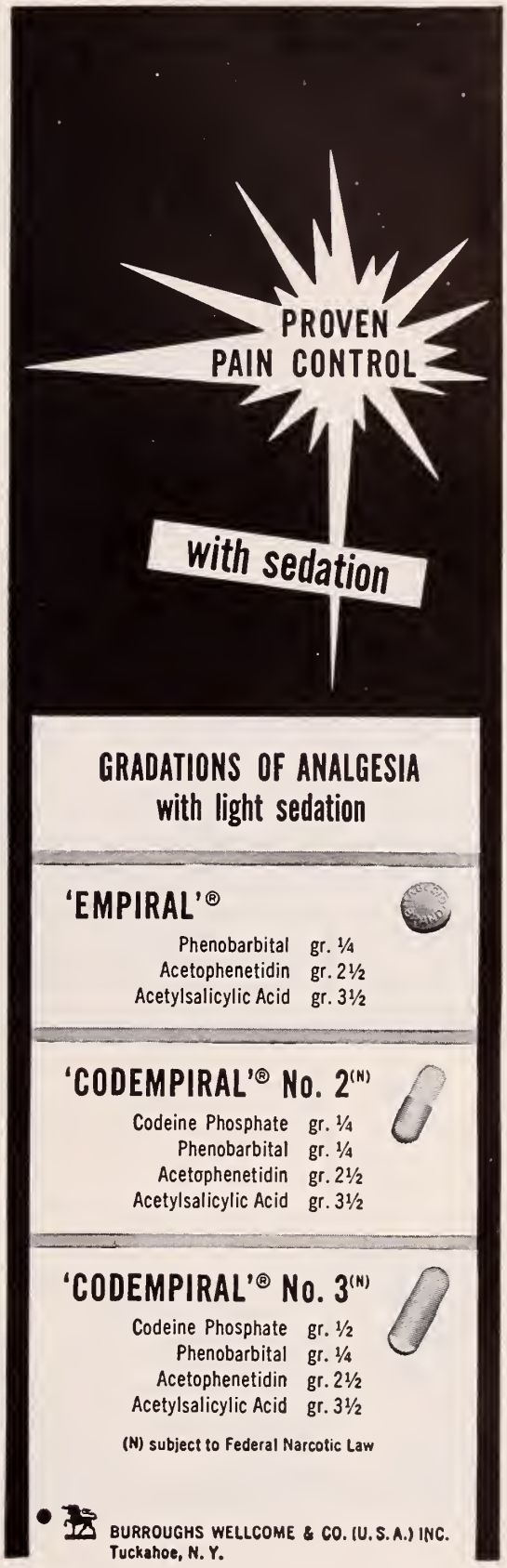
Another outstanding feature will be the "Geriatrics Symposium" on Thursday morning which should be of particular interest to every physician.

Outside of the *professional* activities there will also be official tours of Washington, including the city's medical facilities; a performance by Washington Doctor's Symphony Orchestra; a Golf Tournament; and special breakfasts, luncheons, dinners, alumni and fraternity reunions, and Woman's Auxiliary functions.

Oklahoma Physicians Participate

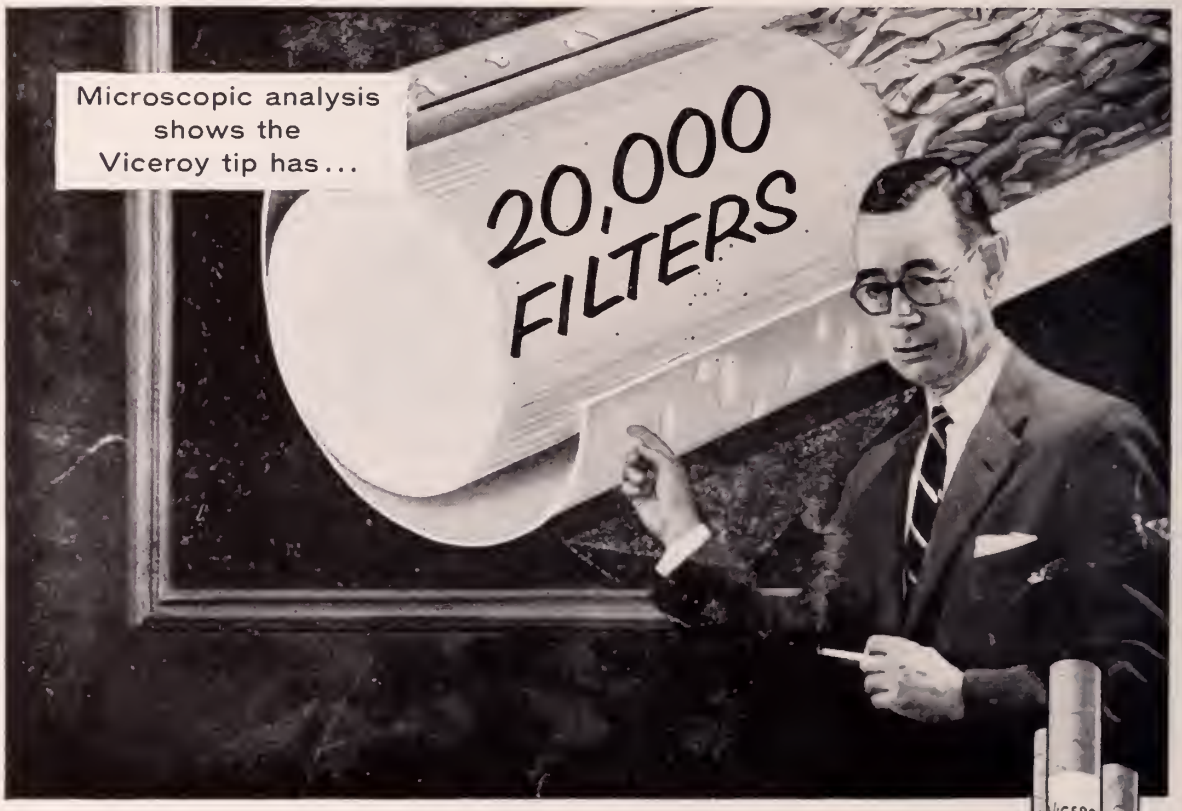
Nineteen Oklahoma physicians will take part in the program. They are: Joseph W. Kelso, Joseph W. Funnell, W. Kelly West, John H. Lamb, Robert J. Morgan, Edward M. Schneider, Charles Daugherty, James K. Devore, Jean S. Felton, Philip C. Johnson, E. S. Berger, William L. Hughes, Robert M. Bird, Harold G. Sleeper, Samuel T. Moore, Herbert Kent and Kirk T. Mosley all of Oklahoma City.

Also attending the meeting and participating in the business sessions were Kelly M. West, M.D. of Oklahoma, who is vice-president and Henry H. Turner, M.D., the councilor to the Southern Medical Association from Oklahoma, and Marshal O. Hart of Tulsa and Harle V. Barrett of Ponca City.



HERE'S WHY SO MANY DOCTORS NOW SMOKE AND RECOMMEND

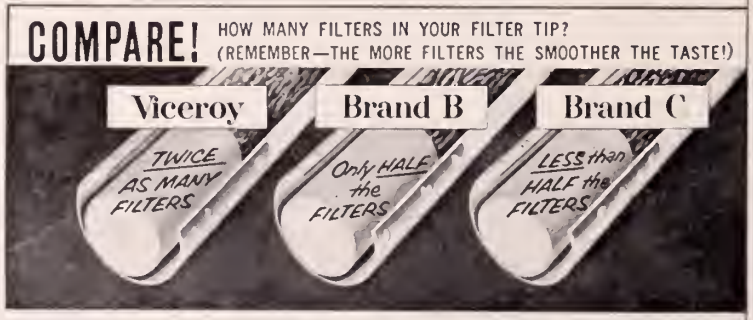
VICEROY



Twice as Many Filters

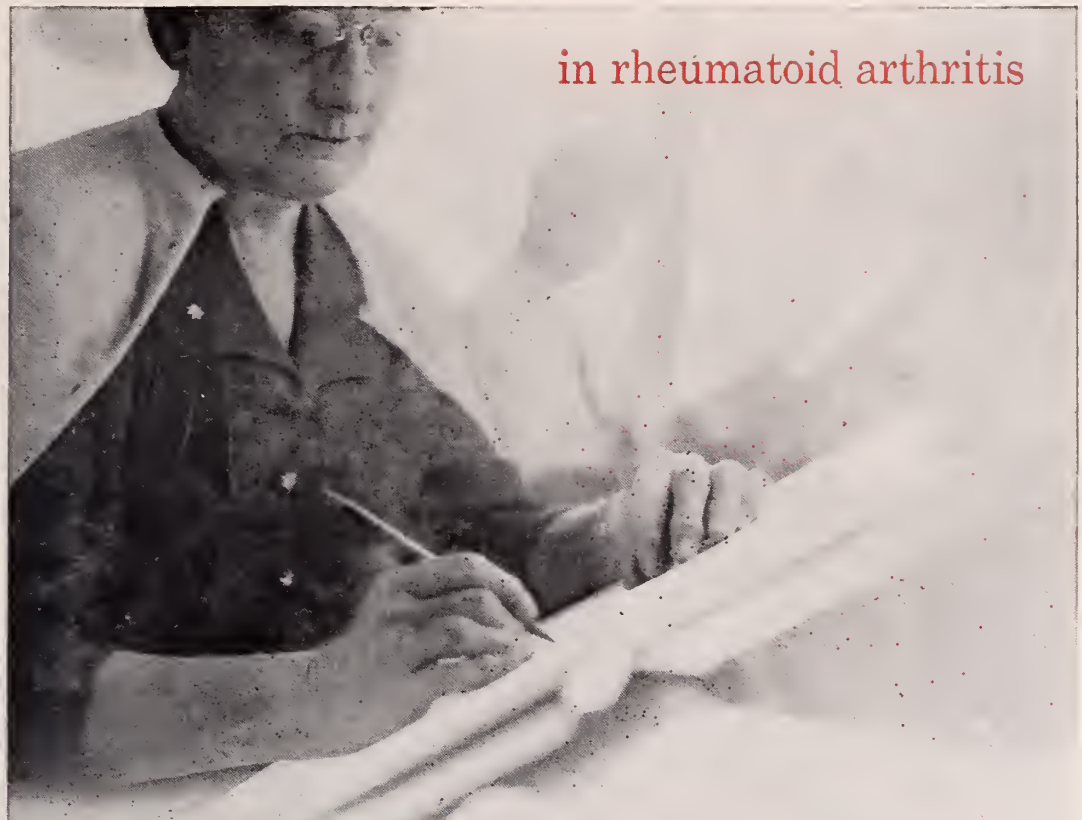
AS THE OTHER TWO LARGEST-SELLING FILTER BRANDS

For the Smoothest Taste in Smoking!



VICEROY'S EXCLUSIVE FILTER IS MADE FROM PURE CELLULOSE—SOFT, SNOW-WHITE, NATURAL!





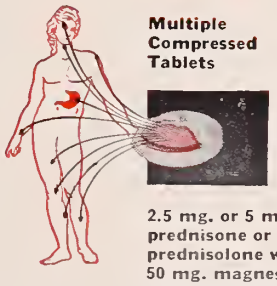
in rheumatoid arthritis

clinical evidence[1,2,3] indicates that to augment the therapeutic advantages of the "predni-steroids" antacids should be routinely co-administered to minimize gastric distress

ROUTINE CO-ADMINISTRATION MEANS

'Co-Hydeltra'

(Prednisolone Buffered)



Multiple Compressed Tablets

2.5 mg. or 5 mg. prednisone or prednisolone with 50 mg. magnesium trisilicate and 300 mg. aluminum hydroxide gel.

'Co-Deltra'

(Prednisone Buffered)

All the benefits of the "predni-steroids" plus positive antacid action to minimize gastric distress.

References: 1. Boland, E. W., *J.A.M.A.* 160:613 (February 25) 1956. 2. Margolis, H. M. *et al.*, *J.A.M.A.* 158:454 (June 11) 1955. 3. Billet, A. J. *et al.*, *J.A.M.A.* 158:459 (June 11) 1955.

MERCK SHARP & DOHME
DIVISION OF MERCK & CO., Inc.
PHILADELPHIA 1, PA.

Combined for a

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resistant

new

METRETON *tablets*

METICORTEN (PREDNISONE) PLUS CHLOR-TRIMETON WITH ASCORBIC ACID

For prompt and effective relief, especially in many resistant allergic disorders, METRETON affords the benefits of two established agents with unexcelled anti-inflammatory, anti-allergic and antipruritic effectiveness. *supported by essential vitamin C*—for stress support and for postulated effect on prolonging steroid action *no better corticosteroid*—original brand of prednisone...minimal electrolyte effects—METICORTEN *no better antihistamine*—unexcelled in potency and freedom from side effects—CHLOR-TRIMETON effective against hay fever, pollen asthma, perennial rhinitis, acute and chronic urticaria, angioneurotic edema, drug reactions, inflammatory and allergic eye disorders, pruritic and contact dermatoses.

formula: Each tablet of METRETON provides 2.5 mg. of METICORTEN (prednisone), 2 mg. of CHLOR-TRIMETON maleate (chlorprophenpyridamine maleate), and 75 mg. ascorbic acid.

supplied: METRETON Tablets, bottles of 30 and 100.

frontal attack

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METRETON *nasal spray*

METICORTELONE (PREDNISOLONE) PLUS CHLOR-TRIMETON

quickly clears nasal passages • avoids rebound engorgement and sympathomimetic side effects • safe even for cardiacs, hypertensives, children, pregnant patients •

Composition: Contains 2 mg. (0.2%) METICORTELONE acetate (prednisolone acetate) and 3 mg. (0.3%) of CHLOR-TRIMETON gluconate (chlorprophenpyridamine gluconate) in each cc.

Packaging: 15 cc. plastic "squeeze" bottle, box of 1.

METRETON,* brand of corticoid-antihistamine compound; METICORTEN,* brand of prednisone; METICORTELONE,® brand of prednisolone; CHLOR-TRIMETON,® brand of chlorprophenpyridamine preparations. *T.M.

MT-J-576



Schering


to quiet the cough
and calm the patient . . .
Expectorant action
Antihistaminic action
Sedative action
Topical anesthetic action
PHENERGAN®
EXPECTORANT
Promethazine Expectorant with Codeine
Plain (without Codeine)
Wyeth®
Philadelphia 1, Pa.

A.H.A. Release Statistics

In a recent survey by The American Hospital Association it was announced that a steady rise has taken place in hospital admissions. The following information was gathered from questionnaires answered by 6,956 hospitals throughout the country.

It was reported that United States hospitals cared for 21,072,521 patients last year, which represented an increase of 727,090 patients over 1954's total.

Last year a total of 3,476,753 babies were born in U.S. hospitals. This was 134,154 rise from the 1954 total.

In 1955, the AHA reported, United States hospitals spent $5.594 billion to care for these patients and newborn infants compared with $5.229 billion in 1954; an increase of $365 million.

Non-Profit Hospitals

The non-profit general hospitals which care for the great majority of the acute, short-term cases in the nation, spent an average of $25.15 a day for the care of each patient. This represented an increase of $1.37 over 1954. In these hospitals the average expenditure on each patient in 1955 was $181 compared with $171 in 1954.

The patients in the non-profit general hospitals paid an average of $1.75 a day less in 1955 than it cost to care for them. Total income from patients of all hospitals in this classification in 1955 was $2.326 billion while expenses totaled $2.508 billion. Patient income made up 91.4 per cent of expenses in 1954. The balance came from contributions, grants and income from sources such as endowments.

Hospital expenses continued to rise, reflecting the increase in payrolls and the increased cost of supplies and equipment. Sixty-four per cent of hospital expenditures was for payroll. Total 1955 payroll of all hospitals was $3.581 billion for 1,300,733 full-time employees. The 1954 hospital payroll was $3.344 billion for 1,245,669 full-time workers.

Other Facts Released

More than 290,000 professional nurses provided service in hospitals in 1955. This included almost 261,000 nurses as hospital employees and more than 30,000 private duty nurses.

The average patient stay in the short-term general hospital was 7.8 days, the same as in 1954.

Assets of all hospitals in 1955 totaled nearly $12 billion.

Nearly half of all U.S. hospitals were non-profit. Eighteen per cent were proprietary, and 32 per cent were operated by agencies of federal, state or local government.

Ninety-five per cent of all U. S. hospital admissions last year were to general hospitals. However, psychiatric hospitals cared for 54 per cent of the total number of patients hospitalized on each day.

Thirty-eight per cent of all U.S. hospitals had less than 50 beds; 22 per cent had from 50 to 99 beds; 26 per cent had between 100 and 299 beds, and 14 per cent had 300 beds or more.

Federal Hospitals

The 428 federal hospitals, representing six per cent of all U. S. hospitals had a bed complement of 183,162. The 173 Veterans Administration hospitals had 119,830 beds, or 65 per cent of the hospital bed total operated by the Federal government.

"Patients without primary renal disease, but with albuminuria and high nonprotein nitrogen due to congestive circulatory changes, can be adequately and safely treated with Neohydrin for long periods of time."*

*Griffith, G. C.; Dimitroff, S. P., and Thorner, M. C.: Ann. Int. Med. 45:7, 1956.

07656

Deaths

The October issue of the Journal *carried an incorrect listing of John H. Reynolds, Sr., M.D., of Muskogee in this column. Doctor Reynolds is not deceased but was the victim of erroneous information. Our most sincere apologies to Doctor Reynolds for letting this error slip through unnoticed.—Ed.*

L. G. WOLFF, M.D.
1868-1956

L. G. Wolff, M.D., retired Okarche physician died September 29.

Doctor Wolff was born July 4, 1868. He was a member of the Canadian County Medical Society and a life member of the Oklahoma State Medical Association. In 1954 he became a member of the State Association's 50-Year Club.

He graduated from the Missouri Medical College in St. Louis, Missouri in 1899.

SAMUEL W. MINOR, M.D.
1871-1956

Samuel W. Minor, M.D., Hinton physician recently died at the age of 85.

Born in Cumberland City, Tennessee, October 8, 1871 he obtained his early education at Cumberland City Academy, Cumberland City, Tennessee. He graduated from the University of Tennesee Medical College in 1905.

Doctor Minor was a member of the First Christian Church, the IOOF Lodge and the Masonic Lodge.

EVERY WOMAN WHO SUFFERS IN THE MENOPAUSE DESERVES "PREMARIN"

widely used natural, oral estrogen

AYERST LABORATORIES
New York, N.Y. • Montreal, Canada
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Bellevue Convalescent Hospital
Completely Air Conditioned
Providing
Professional Care and Personal Attention for Convalescent, Chronic and Medical Patients
436 N.W. Twelfth Street
Oklahoma City, Oklahoma
RE 6-8320
Jas. R. Ricks, M.D. Medical Director
Norman L. Thompson Owner and Manager
Mrs. Dade Thompson, Asst. Mgr.

Journal Report:

Hypertensive symptoms relieved in 96% of patients

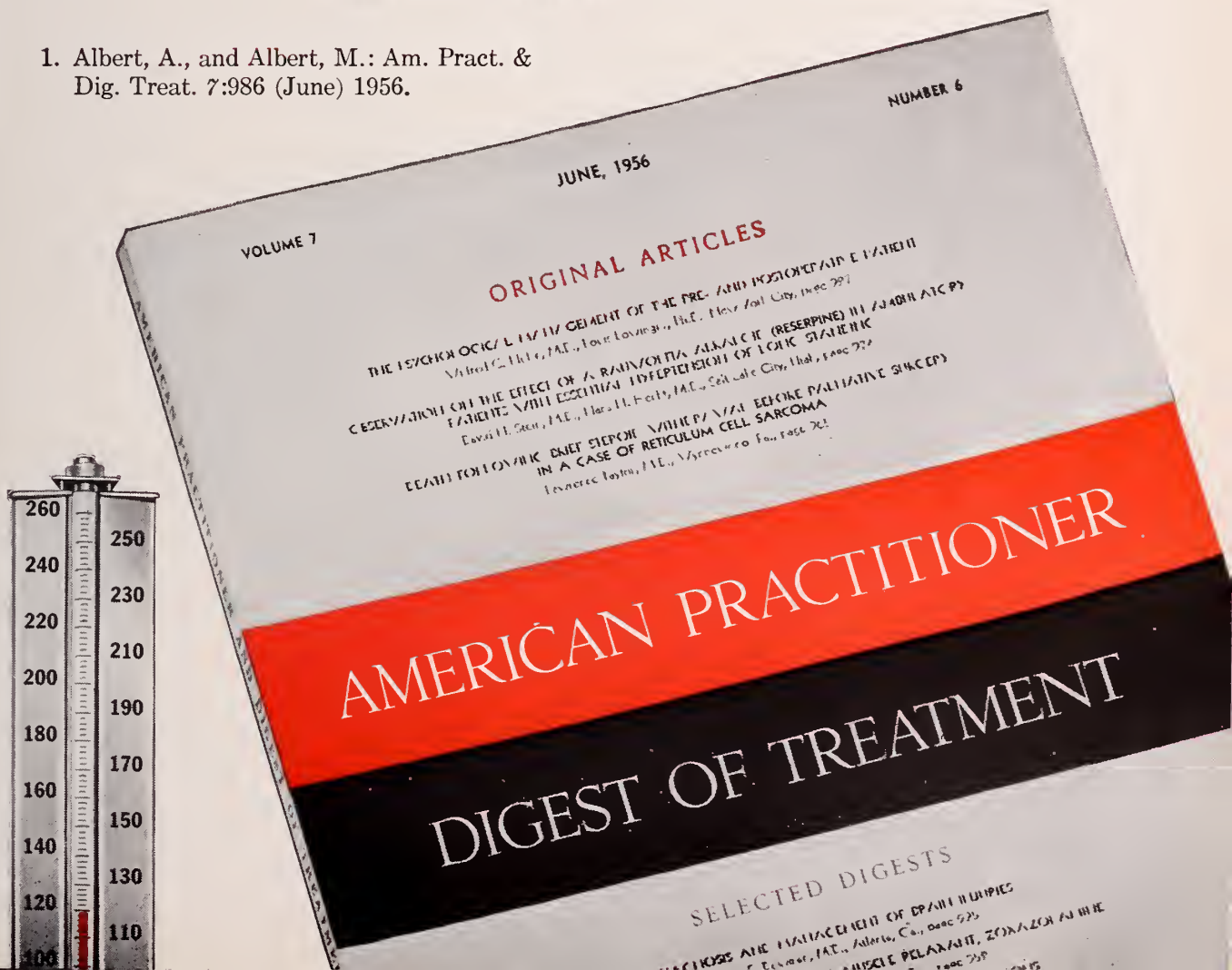
"Comparison of pentolinium [ANSOLYSEN] with other preparations in 25 patients with severe essential hypertension, for whom all other methods of management had failed, showed that pentolinium is the most effective of available agents in reducing dangerously high blood pressure to the desired levels, and in modifying some of the complications of hypertension, as cardiac decompensation, cardiomegaly and retinopathy. . . .

"In 96 per cent (24 patients) clinical symptoms were relieved and the blood pressure maintained at comfortable levels. . . ."[1]

ANSOLYSEN®
TARTRATE
Pentolinium Tartrate
Lowers Blood Pressure

Wyeth®
Philadelphia 1, Pa.

1. Albert, A., and Albert, M.: Am. Pract. & Dig. Treat. 7:986 (June) 1956.



NEW

ATARAXOID is a unique, new combination of STERANE and ATARAX, which now permits simultaneous symptomatic control and reduction of attendant anxiety and apprehension in rheumatoid arthritis and other indications.

The added tranquilizer control, desirably easing mental stress, also directly assists clinical progress. It minimizes the chance of exacerbation related to emotional strain and facilitates patient confidence and cooperation in the therapeutic program toward maximum rehabilitation.

ATARAXOID exerts the anti-rheumatic, anti-inflammatory activity of STERANE distinctly superior to previous steroids, effective in radically reduced dosage, and with minimal disturbance of electrolyte and fluid metabolism.

The ataractic effect is a central neuro-relaxing action – the result of a marked cerebral specificity – free of mental fogging and devoid of any major complications: no liver, blood or brain damage. This peace-of-mind component is also used in the lowest dosage range.

Supplied: Each green, scored, ATARAXOID oral tablet contains 5 mg. prednisolone (STERANE) and 10 mg. hydroxyzine hydrochloride (ATARAX). Bottles of 30 and 100.



PFIZER LABORATORIES
Division, Chas. Pfizer & Co., Inc.
Brooklyn 6, New York

the first and only ataraxic-corticoid

araxoid*

prednisolone and hydroxyzine

Pfizer

combining the newest, safest tranquilizer, ATARAX® + the newest, most effective steroid, STERANE® (prednisolone)

simultaneously **controls the symptoms and the apprehension**

In Rheumatoid Arthritis, other collagen diseases, bronchial asthma and inflammatory dermatoses

*Trademark

NEW

For Pain-Fre

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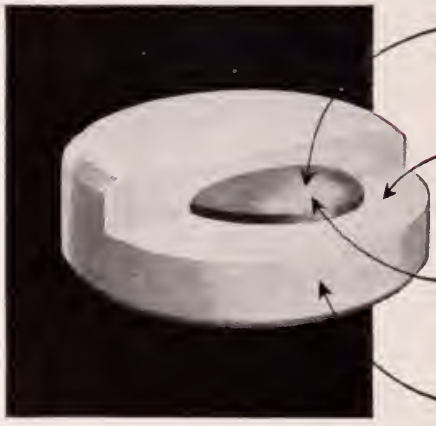
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PHYSICIAN PLACEMENT

The following physicians have expressed a desire to locate in Oklahoma. To the best of our knowledge, the names, addresses, qualifications and availability are current and accurate.

Additional information concerning most of these physicians is available in this office. Anyone interested in contacting these physicians may do so directly or may use the state office as an intermediary.

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice.

Internal Medicine

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Pathology

Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, George Washington University, 1950, will finish four years pathology residency in January, 1957.

Pediatrics

David Goldstein, 66 Lafayette Ave., Staten Island 1, N. Y., age 38, Long Island College of Medicine, 1949, two year residency in pediatrics, Board certified, available after Oct. 1, 1956.

Surgery

Edward Wendell Foster, 147 W. Main, Meriden, Conn., age 62, Harvard University School of Medicine, 1924, certified by specialty board, veteran, available now, would consider surgery, obs.-gyn., or general practice.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available Jan. 1, 1957.

Boyd M. Saviers, 514 Lacewood Dr., Dallas, Texas, age 33, University of Oklahoma, 1947, finishing third year residency at Methodist Hospital of Dallas, veteran, available September, 1956.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36. University of Illinois, 1949, interned at Anckee County Hospital, St. Paul Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

Harry Emanuel Fisher, Jr., Box 161, Barnes Hospital, St. Louis 5, Missouri, age 33, University of Oklahoma, 1952, veteran, available July 1, 1956.

CLASSIFIED ADS

WANTED: GENERAL PRACTITIONER. OKLAHOMA LICENSE REQUIRED. SALARY OPEN. Family Residence and Maintenance Available at Nominal Cost. Good Setup for Recent Graduate, Retired Serviceman, or Older Man Seeking Regular Hours and Less Strenuous Work. Contact Supt. Oklahoma Veterans Home Facilities, Sulphur, Oklahoma.

COLLEGE PHYSICIAN WANTED for Student Health Service at State College of Washington. Beginning salary is 10,000 annually. Three Student Health physicians are responsible for the care of the college students. Washington has reciprocity with Alaska, Arizona, Arkansas, Colorado, Minnesota, Nevada, Oregon, South Dakota, Texas and Wisconsin. Clinic hours are 10:00-12:00 A.M. and 1:00-5:00 P.M., weekdays, and Saturday A.M. Write Harry B. Zion, M.D., Director, State College of Washington, Pullman, Washington.

FOR SALE: Used Model III A, 6 Channel Grass Electroencephalograph in 8 Channel Cabinet. Springer Clinic, 604 S. Cincinnati, Tulsa, Okla., Phone LUther 7-6621.

ELECTROCARDIOGRAPH FOR SALE: Recent model, Beck-Lee "Cardial," Reasonable, J. W. Coin, M.D., 837 N.E. 15th, Oklahoma City, Okla., Phone FO 5-9211.

Editorials

To The Legislators And The Board of Regents

You gentlemen must, as do the rest of us in Oklahoma, feel a warm glow inside when you contemplate the Big Red. No finer organization has ever been developed. The newspapers indicate that a few men stand-out. One needs only to watch a game to see that this isn't so. The whole spirit of the team, the speed of getting into and out of the huddle back to the line of scrimmage, the tremendous defense work and the over all toughness and superb condition of every man paint an entirely different picture. One is also impressed by the confidence of the coaches in their men. Remember your dismay when a new team was sent in with Maryland on our one yard line in the Orange Bowl in 1954?

You, indeed, must be proud of the part that you have played in the development of the Big Red, for the Big Red is not an ornament suspended from the neck of the University, but is an integral part of the University. Wilkinson and Jones have professorial ranks on the University faculty. It is their job to develop the young students who enter their department. They head up a fine faculty in doing just this. It is true that the students who enter their department have shown high aptitude for the subject, but this is in no way different from any other department except in the high percentage of those who have shown that aptitude.

The University has had All-Americans in every field of endeavor for which she prepares young people: business, engineering, music, teaching, physicis, chemistry, geology, medicine and all the rest. *Our concern is the school of medicine.*

If we are to develop the material that comes to us, we must have the faculty to do it, a faculty such as the Big Red has, men who not only excel in their fields but men dedicated to the task of developing in the student every potential that he has, and men whose concept of the doctors place in society leaves nothing to be desired. Our material is as good as that of any school and a good deal better than most of them.

How can it be done? This requires a constand watching by the Administration of the School of Medicine and the University for such men as they appear on the horizon. The invitation to join the faculty must be backed up by the means to make the invitation attractive. Money is not the primary concern of men and women dedicated to teaching and to research, but it is an essential part of living. They are dedicated to teaching and research and it matters not too much whether this is done in Oklahoma, Texas, New York or Florida. An offer which does not insure the ordinary comforts, a few luxuries and the education of their children cannot attract any who could get this elsewhere.

There has been a good deal said about the full time teacher in the school of medicine augmenting his income by consultation privileges. The intimated purpose of this is wrong. The consulting doctor and his patient should have the privilege of obtaining the advice of the teacher who knows a great deal about the problem at hand. This should be the purpose of the consultation privilege. The teacher's income should be such that he need not make a time consuming business of consultation to make both ends meet.

The Other Side of the Coin

A man may have a hard time making his income meet expenses. As his family grows he may find it necessary to buy second hand furniture, a used car or a used TV set to give his wife and children a few of modern pleasures. He never has to be satisfied, however, with second rate medical care. All medical schools in the country are class A. All students accepted to them have high scholastic records. Internships and residencies are approved by the Council on Medical Education and Hospitals of the American Medical Association. An intern may take an extra year or two of work in a hospital whose

residency will not count on specialty board training, but it is of no less value to him for what he wants. The American hospital must meet rigid standards for accreditation. A man may buy better accommodations in a hospital but all his money doesn't buy better hospital care . . . more attention perhaps but not better care.

The one uncontrollable factor is the human variation and the medical conscience. It is at this point that accrediting systems must quit. Degrees and scholarship do not qualify a teacher to build a man and a medical conscience. It is in this intangible quality that the Big Red and its faculty must differ from the most. It is this quality in the faculty of the departments of the school of medicine that we must strive for. If you gentlemen provide the means the administration of the medical school and the university can take it from there.

American Medical Education Foundation

A House Committee of the United States Congress has recently mailed a questionnaire to most medical organizations relative to federal aid to medical education. The implications of this questionnaire are apparent to all of us.

As you know, the American Medical Education Foundation was organized and sponsored by the American Medical Association in 1951 to seek financial contributions in behalf of the medical schools. The medical profession's annual goal is $2,000,000 and this sum is needed in addition to funds contributed annually from other sources. Industry and business are asked to assist in raising the additional amounts to meet the annual $10,000,000 operational deficit of our medical schools. Unless we reduce this deficit, the practice of medicine as we know it today will no longer exist.

In 1955 the AMEF disbursed $1,120,000 to the medical schools. Since 1951 the total forwarded by the Foundation has been $4,-684,312. Together with contributions from industry collected through the National Fund for Medical Education $9,598,491 has been made available to the schools since 1951.

These statistics prove conclusively that we need to become more cognizant of the pressing financial need that exists in our medical schools and my appeal this month is directed to those members of the profession who have not yet given their financial support either to the American Medical Education Foundation or to the medical schools from which they graduated.

By contributing to the AMEF the medical profession is factually stating its depth of conviction in the present character of our medical schools. Additional solid response from our profession will stimulate a like response from business and industrial groups. Doctor Louis H. Bauer, AMEF President, points out. "As long as our institutions of higher learning remain free from Federal subsidy and control, the future freedom of this nation is assured and the rights of the individual protected."

Won't you make your contribution in the enclosed envelope, and do your part in protecting the medical professions' position as one of the last outposts of free enterprise in America today?

Prize Offered for Case Report by House Officer

The *Journal* offers a prize of $100 for the best case report submitted to it by a house officer from one of the Oklahoma hospitals in 1957. There are only two stipulations:

1. At least 10 case reports must be received during the year and if not the time will be extended until that many have been submitted.

2. The case report must be received not later than six months after his tour of duty as a house officer at that hospital has ended.

The case reports submitted will be judged solely by the Editorial Board.

Scientific Articles

A Basic Evaluation Technique:
THE INFERTILE COUPLE

W. H. MASTERS, M.D.

THE AUTHOR

W. H. Masters, M.D. graduated from the University of Rochester School of Medicine and Dentistry and is Certified by the American Board of Obstetrics and Gynecology.

Doctor Masters is now in the Department of Obstetrics and Gynecology, at Washington University in St. Louis, Missouri. He was a guest speaker this year at the Oklahoma State Medical Association Annual Meeting.

Any complete approach to the problems of the infertile family unit, must, of necessity, be divided into two distinct categories. Of major importance is the dissemination of fundamental information about conception, and of equal import is the innate demand for infinite detail in the infertility workup. The fundamental basis, then, for effectively handling the infertile family unit is efficient organization of patients' and physician's time, while providing definitive medical information and subjecting the infertile unit to a detailed work-up routine.

Certain facilities have been found essential for the proper function of a major infertility service. A private office, available for all interviews and discussion of basic family problems is an absolute necessity. A well-equipped examining room should be accessible at all times, and a laboratory must be developed to handle the specific detail relative to the problems of infertility.

All couples seen at the Infertility Service of the Washington University School of Medicine are treated on a private patient basis, but must volunteer the complete cooperation of both husband and wife for at least one year. Certainly, the necessity of treating an infertile couple as a single biologic unit has long been well recognized.[1] Basically it probably matters little what medical discipline undertakes to treat the infertile family unit. It is of major import, however, to hold the unit closely together. Nothing can be of more fundamental family concern than the problems associated with infertility. Early established rapport between the investigator and the members of the infertile unit is of inestimable value in relieving the basic tensions inevitably associated with the exhaustive investigative procedures necessary for any complete evaluation of infertility.

The Intake Interview

Probably the most universally neglected, yet one of the most rewarding practices associated with the basic investigation, is the initial informal interview with both the husband and wife members of the infertile unit. This appointment is arranged out of regular office hours, for the interview usually takes about an hour. The interviewing officer places the couple at ease and mentions the high instance of sterility (one involuntary sterile union in every eight marriages.[2]) Man and wife are brought to realize that as a family unit they comprise no medical oddity but are indeed involved in an unfortunately all too common situation.

Next in order during the initial interview is a detailed discussion of such basic essentails as when to have intercourse, (in relation to the theoretical ovulation time), how frequently to have intercourse, (in order to maintain the best possible sperm production[3]), and ultimately, how most effectively to have intercourse in order to develop the best chance for conception. This discussion is followed by a detailed explanation of the basic physiology of the human genital sys-

tem (both male and female), and the phenomenon of conception. In essence, the interviewer presumes that the average infertile couple does not know where babies come from and tells them in complete detail. The rapport established during this frank sex talk is of major aid during the more demanding phases of a subsequent work-up.

It has been surprising to learn how rarely adequate basic advice on the details of conception has been previously given to couples entering the infertility project. Usually this inadequate preparation results from the physician's failure either to allow sufficient time for an adequate and completely effective initial interview, or to discover problems of sexual incompatibility in a couple too embarrassed or inhibited to disclose them voluntarily. This is particularly true if the couple feels the pressure of time. Obviously in the presence of the other partner, each member of the couple might not readily offer effectively pertinent information. This concern is rectified later, when partners are seen and interviewed separately during the work-up phase of the complete evaluation.

With effective handling of the initial interview, a feeling of enthusiasm should be instilled in the infertile couple. This is especially important if they have experienced previous lack of success over a significant period of years with concomitant expenditure of considerable time and money. However, the physician should certainly curb any intoward enthusiasm by definitely clarifying the probabilities of any one couple's attaining the the ultimate success of conception when faced with concerns of an infertile marriage generally and the precise family unit problem particularly. Fundamentally, the attitude of those connected with the research project is one of short term pessimism and long term optimism. No question is left regarding the overwhelming interest of all the project personnel in the particular family units' problem.

If the infertile unit wish to become members of the basic research project, they have only to notify the laboratory the initial day of any particular menstrual period in order to start the complete clinical evaluation. They are also instructed to have intercourse just as the period is expected or has started; so that the male partner may be checked (with not less than three nor more than five days of continence during his wife's menstrual period. Thus the male is always the first of the family to be checked. There are several reasons behind this approach. First, it must be presumed that he represents 50 per cent of the bargain. Second, he is infinitely easier to check. Third, it has certainly been true in the past that many males confuse a suggestion of infertility with a suggestion of impotence and subsequently have refused adequate and effective cooperation with the examiners. The distinction between the infertile and the impotent male is completely drawn for both husband's and wife's edification during the intake interview. The continence period just described represents the male's most effective sperm production time.

Work-up Routine of the Male Partner

In order, the laboratory determination of a basal metabolic rate, blood count, urinalysis, roentgenogram of chest, subsequently followed by a complete history and physical examination, are the initial procedures of the primary evaluation. In the history, such salient factors as the following are discussed and recorded: Age, period of marriage, frequency of and position during coitus, difficulties in coitus, pregnancy trial time, period of contraception (if any), previous marriages and resulting pregnancies, childhood diseases, especially mumps with resultant complications, other serious illness, operations, venereal disease or general infections, roentgenogram and radium exposure, recent marked change in weight, injuries, occupation, diet, drug and alcohol ingestion, tobacco consumption. This detailed history is followed by a complete physical examination with, of course, emphasis on the lower abdomen, the genitals and the prostate gland. Finally a sperm specimen is collected for laboratory evaluation.

Sperm can be obtained from the human male in at least five different ways. Only one of these techniques, however, is considered significantly informative to be used by

the Infertility Service. First, The Withdrawal Technique: The couple has intercourse, and as the male feels ejaculation imminent, he withdraws and collects the specimen in a clean container. The difficulties involved with this technique are significant. The male frequently loses a few drops of the ejaculate. Since the major portion of the sperm is in the first quarter of the male ejaculate, this technique may well result in misinformation for the physician. Second, The Condom Specimen: For this technique, intercourse is completed and the condom specimen brought to the physician's office for analysis. The difficulties with this technique are of even more concern. It is impossible for the male to remove the condom successfully without losing part of the ejaculate. Certainly, the examiner cannot remove all the ejaculate from the condom; moreover, both the rubber and the talcum frequently associated with condoms are spermicidal. Thus this technique also is fraught with the possibilities of false information. Third, The Huhner Technique: In this instance the couple has intercourse, and the wife visits the physician's office for aspiration of cervical mucus a few hours after coitus. This technique, in company with both (1) and (2), will certainly demonstrate major discrepancies in sperm production and will also describe immediate sperm motility. If dead sperm are found in cervical mucus, however, this technique does not delineate between the possibility of the sperm being ejaculated dead and the possibility of an antipathy to these particular sperm by the cervical mucus. Four, Prostatic Massage: Massaging the prostate will certainly provide a perfectly adequate sperm count, since the first few drops of the ejaculate (the part that really matters) are effectively obtained by this technique. It should be pointed out at this time, however, that in all probability, one of the least important points in the evaluation of the male's sperm specimen is the sperm count. Five, The Masturbation Technique: This is the only technique acceptable to the Infertility Service. The entire ejaculate may be easily obtained, and it should be obtained under relatively sterile conditions. Once satisfactorily obtained, the complete sperm specimen is evaluated in detail over a twenty-four hour period.

The semen specimen is allowed to liquefy before a culture is taken. Analysis is then performed following essentially the criteria offered by Falk and Kaufman.[4] Evaluation is made according to total volume, viscosity, turbidity, count per unit volume, and total count, initial motility and morphology.[5-14] Finally and most important, subsequent sperm motility is defined throughout a twenty-four hour observation period. Certainly, the greatest emphasis is placed on the criteria of sperm motility and sperm longevity. Most observers today consider these factors as the most important definitives of semen quality. It matters little what the initial sperm count is, if adequate numbers of normal appearing sperm do not live for a sufficient time and swim effectively enough to reach the ampulla portions of the fallopian tubes where fertilization actually occurs. Without these two characteristics demonstrable in a sperm specimen, the individual male is considered sterile.

Routine Examination of the Female Partner

If the male is not completely defined as sterile, the female is then studied. The initial investigation of the male partner is usually completed by the fifth or sixth day of the menstrual cycle. The wife is then seen alone on day six or seven of this first cycle of study. If one can move directly from evaluating the male to evaluating the female partner, continuity is established, and a sense that "something is being done" is brought to the couple. Too often the press of previous medical commitments delays the work-up of either partner, and the initial enthusiasm engendered by the intake interview is dissipated.

A complete history is taken with deliberate repetition of certain points in the husband's history. The following pertinent points are discussed: Previous professional advice, including intercourse timing; frequency and positioning; menstrual history; period of present marriage; period of contraception; period of pregnancy trial and difficulties of coitus; previous marriage and resultant pregnancy; temperature charts; childhood diseases; serious illnesses; operations; pelvic infection; veneral diseases; roentgenray and radium exposure; recent marked change in

weight; injuries; occupation; diet; drug and alcohol ingestion; and tobacco consumption. A thorough physical examination is then completed with a complete and careful examination of the pelvis. A cervical culture is obtained at this time.

The patient is instructed in taking daily vaginal smears throughout the first investigative menstrual cycle. Smears are taken at approximately the same time every day, except during the presumptive ovulatory phase (10th through the 18th days), during which slides are taken twice a day, at 12 hour intervals. Since correlative studies are being conducted in all cases with basal temperature variations, the patient is given a prepared chart for recording temperatures and is taught to take daily basal rectal temperatures. The value of both vaginal smears and basal temperature changes as possible ovulatory indices is explained to the patient.

Within the next five days, the wife is again seen alone. First, she is exposed to a laboratory schedule involving a basal metabolic rate, complete blood count, urinalysis and roentgenogram of her chest. Hysterosalpingography is also scheduled, the time chosen to fall between the end of the menses and the presumptive ovulation date. This timing obviates the possibility of extrusion of loose endomentrial tissue into the peritoneal cavity or embolism of dye through an open uterine sinus; at the same time, it makes a disturbance of conception highly improbable. There is also the incidental chance according to numerous reports in the literature, that conception may follow directly in the wake of this test for tubal patency.[15]

Routine technique is employed in hysterosalpingography. Fundamentally, this clinic has employed aqueous radiopaque media. The salpingogram is usually done on an outpatient basis. If necessary, antispasmodics or sedatives are given to further the effectiveness of the examination. When the procedure is completed, the wet films are shown to the patient and explained in detail.

It is important not to waste the possibilities of pregnancy during the first cycle. Accordingly, from the menstrual history alone, the patient is given an arbitrary fertility schedule. Intercourse is scheduled three times at 36 hour intervals, preceded by a three day period of abstinence.[3] The schedule is estimated on the basis of the fairly well accepted fact that ovulation occurs generally 14 days, plus or minus two days, before the onset of menses.[16]

The initial work-up of the female is completed at the end of the first complete menstrual cycle with an endometrial biopsy. A Novak suction curette for endomentrial biopsy is used.[17] The biopsy is performed within the first few hours after the onset of the menses. It is never performed before the onset of the menses, for fear of the remote but ever-present possibility of disturbing a pregnancy, although it is recognized that menstruation causes a variable degree of loss of morphologic detail. However, the tissue certainly may be evaluated broadly if taken within the first three or four hours after the onset of menstrual flow.[18, 19]

At the time of this third and last visit of the wife during the first menstrual month, she presents her vaginal smears for the entire cycle. These are stained by the Shorr technique[20] and later studied in detail.[21] At the next visit the stained smears are demonstrated and explained to the patient in correlation with the endomentrial biopsy sections, temperature chart, and result of the basal metabolism test.

The detail just described represents the initial month's effort with the infertile couple. Obviously, it is anticipated that the material and information turned up in the first month will determine the course of subsequent definitive investigative procedures.

Fundamentally, four types of sterility problems are encountered in infertile family units. In order of frequency, they are: First, the couple which, as far as it knows, has never conceived. Second, the couple which rather frequently conceives and just as regulary aborts. Third, the couple which becomes sterile after one pregnancy. This family unit describes little or no difficulty in attaining its first conception, but thereafter is unable to achieve a second pregnancy. Finally, Fourth, (a combination of groups

2 and 3) is the one pregnancy couple which, with subsequent conceptions joins the multiple aborter group.

The handling of each of these problems represents differences in technique; in investigative approach; and in corrective therapy. Suffice it to say, that an infertility investigation cannot be successfully accomplished without a complete evaluation of the family unit proper, following in general the fundamental techniques described in this paper. Without the basic organization of the initial interview and the detailed initial screening work-up, sufficient information cannot be obtained to tackle successfully any of the four groupings of infertility problems.

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The Prevention of Esophageal Stenosis From ALKALI BURNS *in* CHILDREN

T. R. PFUNDT, M.D.

THE AUTHOR

T. R. Pfundt, M.D., is a graduate of the University of Oklahoma School of Medicine and is Assistant Professor of Pediatrics there. He is a Diplomate of the American Board of Pediatrics. Doctor Pfundt is Associate Director of the Poison Information Center, an organization recently developed for the prevention and proper handling of poisoning cases in Oklahoma.

Reduction of the mortality and morbidity rates of accidental alkali burns due to ingestion begins with the prevention of the ingestion. This is an educational process and is only one specific goal in the multifaceted educational approach to the prevention of all poisoning. It is directed toward and should be participated in by both medical and lay persons.

The worth of lay education in the prevention of disease has been amply demonstrated. One of the simplest examples concerning the poisoning problem was accomplished almost 30 years ago and has not been equalled for efficiency in reducing suffering from lye burns. Doctor Chevalier Jackson worked for several years to pass a law through Congress to the effect that caustic alkalis should be labeled "Poison." The law was passed in 1927, and although the nationwide effect could not be measured, it is known that the incidence of lye burns due to ingestion was reduced by 50 per cent in the states tested by 1934.[1] In recent years the relative rise of accidents to first place as the leading cause of death in children over one year of age has helped stimulate the establishment of poison information centers throughout the country to study and cope with the large segment of the general problem. Lay education by various means, newspaper, radio, television, exhibits, and talks to organiza-

tions or individuals is a major weapon to these centers.

The emphasis on prevention of poisoning, including caustic substances*, must also be stressed by medical persons. For instance, what better chance does a physician have for dissemination of vital poison information that at a child's well-child examination at one years of age? The doctor will satisfy himself that the patient's routine immunizations are in order, but he should also "immunize" against the number one killer of children at the time when the incidence of accidental death swings sharply upward. It does this because of the child's developing curiosity, agility, and range of activity in the midst of multiple hazards. A crippled child as the result of ingestion of alkali means that somewhere there has been neglect—because it is a preventable happening.

The preventive approach is particularly tailored to the age range of the highest incidence of poisoning. Kernodle[1] and more recently Carver[2] are in close agreement that by far the most cases occur between one and five years of age. This is also common experience wherever poisoning is reported. Kernodle states that in his series of 136 cases of lye ingestion, 50 per cent occurred between 1 and 2 years of age; 32 per cent between 2 and 5 years of age; and by adding 2 per cent during the first year of life, the total is 84 per cent occurring in the preschool years. Carver, reporting from Duke University on 233 cases over a period of 25 years, places 4.7 per cent during the first year; 48.3 per cent during the second year of life; and 27.7 per cent from 2 to 5 years, for a total of 80.7 per cent in the preschool years. These figures of 50 per cent and 48.3 per cent in the respective studies for the second year compared with 2 per cent and 4.7 per cent during the first year dramatical emphasize the oportunity for preventive education from all informed sources at about the first birthday if not before.

It is also apparent that the educational approach to poisoning has its greatest possibility in certain population segments and in certain sections of the country. For instance, Press[3] has shown in an early statistical compilation of 375 cases from Chicago that by dividing the population into five groups socioeconomically, 64 per cent of poisoning occurs in the two lowermost groups comprising 42 per cent of the population. The upper groups contain only 14 per cent of the cases in 30 per cent of the population. One wonders whether or not this trend might be more marked in the 12 southern states, of which Oklahoma is one, showing twice the incidence of accidental death from poisoning than the national average.[4]

After a child has ingested alkali the prevention of permanent disability from esophageal stenosis is still the prime objective. The accomplishment of this end has always fallen far short of its potential because of delay in seeking medical attention, but it might reasonably be expected that this undesirable situation will tend to correct itself in the future. Even Wen - Chih Hung,[5] reporting 130 cases admitted between 1938 and 1951 to the Taihoku Imperial University Hospital and the National Taiwon University Hospital, states that 89 cases presented themselves with cicatrical stenosis and only 41 as acute phase burns. Carver's figure is 170 out of 233 presenting with stenosis. Palmer[6] records that 58 per cent of the patients will develop severe dysphagia within one month, 80 per cent within two months, and that 99 per cent of all stenoses develop within eight months of the ingestion.

The details of management of alkali burns of the esophagus have been subject to controversy for many years. Basically it has revolved around the question of when to start dilation and how long to hope that surgery can be avoided. It is not the intent of this discussion to enter into the therapy of established esophageal stenosis, but the prevention of stenosis by optimum therapy of acute phase cases must be re-evaulated because of the addition of Cortisone to the regimens used in recent years. The results of many systems of dilatations are adequately documented. Salzer[7] outlined a time schedule extending over a period of six years and in 1934 presented a series of 180 cases with 90 percent good results as evidence for early dilatations. Similar American reports, es-

*Drano, Holly Pipe Cleaner, Pronto, Purex Pipe and Drain Cleaner, Skale Kut, Easy-Off Oven Cleaner, Lewis Eagle Lye, Sal Soda

sentially modifications of Salzer's technique, were contributed by Martin and Arena,[8] Crowe,[9] and Kernodle.[1] These techniques represented an advance over the late dilatation systems which treated stenosis only when it occurred in the belief that early interference actually contributed to the build up of scar tissue. This philosophy was advocated mainly by Vinson[10] and Stumboff.[11]

The use of Cortisone in conditions involving the damaging effect of scar tissue raises the question as to whether dilatation is necessary at all in the majority of cases. The experimental evidence for its use is most encouraging. The inhibitory action of Cortisone on fibrin formation, fiborblastic activity, cellular infiltration and capillary formation is well known.[12 a-c] Evidence from the experimental prevention of cicatrical stenosis from induced burns is also clear in its direction. Rosenberg showed in his first publication[13] the excellent effect of Cortisone in reducing the incidence of stenosis in rabbits but also the high incidence of infection and twice the mortality rate as his controls showed when no antibiotic was given with the Cortisone. He subsequently published results of his studies using the same technique of lesion production and Cortisone usage, but added a group of animals receiving penicillin in addition.[14] His results in stricture prevention were about the same but infection was markedly reduced although still present. The so called "broad spectrum" antibiotics could probably yield better results. The literature contains many references to infection during Cortisone usage.[15 a-c]

At present there is no statistically significant series published on the use of Cortisone in acute phase alkali burns in man, but there are reports of excellent results in single cases some of which were severely burned by large amounts of highly caustic material. In 1953, Smith[16] published an outline of therapy which was admittedly untried at the time of publication but was based on the steroid-antibiotic-symptomatic approach to the prevention of stenosis without dilatations. This outline probably summarizes very concisely the newer therapy of alkali burns. The wisdom of the recommended esophagoscopy within 48 hours of the ingestion has probably been questioned the most. It is generally thought, however, that early esophagoscopy is more dangerous than early antegrade dilation and Carver[2] states there has been no instance of esophageal perforation at Duke since 1939. It should be made clear that ideal esophagoscopy for lye burns is not full length esophagoscopy except when mucosal lesions are not found. Most reports on the anatomical location of lye burns of the esophagus place their greatest frequency in the upper third. Therefore, successively lower sections are not entered if tissue destruction is present and indeed, the esophagus is visualized only to the edge of the burned area. This careful relatively atraumatic procedure is part of the preventive scheme of handling cases in that it may prevent a month of unnecessary Cortisone therapy.

A reasonable approach to the acute alkali ingestion case, subject to substantiation by clinical use, now is outlined as follows:

1. Detailed determination of the circumstances surrounding the possible poisoning.
2. Thorough examination of the Oral Cavity and Oropharynx.
3. Neutralization by weak acids or fruit juice if seen within 30 minutes of ingestion.

Note: Some patients may be released at this point if the patient is comfortable and no evidence of mucosal damage is found.

4. Hospitalization.
5. Pharyngeal cultures and sensitivities.
6. PA and lateral chest roentgenograms.
7. Cortisone therapy, 300 mg./day for first day, 200 mg./day for two days, then 100 mg./day for one month unless proven to be unnecessary by esophagoscopy.
8. Antibiotic therapy, at present procaine penicillin daily plus chloramphenicol 50 mg./K./day.
9. Esophagoscopy within 48 hours.

Note: If there is no evidence of a mucosal lesion in the esophagus, the Cortisone may be discontinued and the patient released depending on the status of the oral cavity. In all instances the antibiotic therapy, once started, should probably be continued for a minimum of five days.

10. Esophagram as soon as possible.
11. Weekly esophagrams and chest roentgenograms.
12. Dilatations if stricture develops.

The Cortisone is begun before esophagoscopy because the evidence is that fibroblastic activity begins by the fourth day and it probably takes two days of adequate dosage to block it. The drug probably is not effective if started after 48 hours. This general plan, when supplemented by judicious use of sedation, bland soft diet, possibly antacid therapy in lower esophageal burns, electrolyte evaluation on clinical indications, and daily if not more frequent evaluation for dysphagia and infection seems indicated for the management of acute alkali burns of the esophagus.

Summary

Esophageal stenosis from alkali burns can be prevented. Evidence is presented to show that the educational approach to poisoning prevention, including the caustic alkalis, is effective, that it has not been used to its fullest potential and that its widespread use is the most simple and logical attack on this problem.

A method for preventing esophageal stenosis after ingestion has occurred is presented. It involves early esophagoscopy with Cortisone and antibiotic therapy of patients proven to have esophageal lesions.

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Treatment of POLYCYTHEMIA VERA *With* P_{32}

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THE AUTHORS

Walter H. Whitcomb, Captain USAF presented this paper at the Second Annual Meeting of the Oklahoma Association of House Staff Physicians, June 8, 1956. He is on active duty with the United States Air Force and is currently assigned to the University of Oklahoma Hospital Medical Department.

Sodium radiophosphorus was introduced as a therapeutic agent for the treatment of polycythemia vera by Lawrence in 1940[1] and has been used in the University Hospital Center since 1951. It is an unstable isotope emitting beta radiation with a half-life of 14 days. It can be given orally or intravenously and is concentrated in the nucleoproteins of rapidly multiplying cells and bone. It does not destroy circulating red blood cells. The purpose of this report is to evaluate the results obtained during the past five years and formulate a plan for the management of the polycythemic patient.

Twenty-eight patients with polycythemia vera treated at the University of Oklahoma and Veterans Administration Hospitals were evaluated relative to presenting signs, symptoms and laboratory data. Seventeen of these patients with adequate follow-up and no previous treatment except phlebotomy were evaluated regarding their response to therapy with radiophosphorus. Since this was a retrospective study the clinical diagnosis was accepted unless subsequent events disproved the diagnosis.

The incidence of presenting symptoms is shown in Figure 1 and compared to those

Presenting Symptoms

	Study Group	Sturgis[2]	Harman[3]
No. of Patients	28 patients	127 patients	44 patients
Paresthesias	54%	14.1%	
Headache	43%	39.2%	
Hemorrhage	39%		56%
Dyspepsia	36%		35%
Fatigue	32%		
Pruitis	11%		35%
Bone pain	7%		
Peptic ulcer	7%		12%

Figure 1

published by Sturgis[2]and Harman.[3] Paresthesias were present in 15 patients; headache in 14; hemorrhage, cutaneous or otherwise, in 11; dyspepsia in 10; fatigue in 9; pruitis in 3; and bone pain in 2. Two patients had x-ray evidence of dunodenal ulcer and three had evidence of bleeding from the gastrointestinal tract. This incidence of 11 per cent gastrointestinal bleeding compares with that reported by Lawrence[4] and Harman[3] (12 per cent).

The most common physical signs are summarized in Figure 2 and compared with the incidence reported by Lawrence[4], Tinney et al,[5] Harman,[3] and Wintrobe.[6] Plethora was present in 23 patients; a palpable spleen in 15; a blood pressure of 150/90 or over in 11; a palpable liver in 12; and petechiae in 1.

When critical values (Figure 3) for the red blood cell count, white blood cell count, hemoglobin and hematocrit were artibrarily selected, it was found that 80 per cent of the patients had red blood cell counts exceeding 6,000,000 cells per cubic centimeter; 71 per cent had a hematocrit of 55 per cent or greater; 70 per cent had hemoglobin determinations of 17 grams per 100 cc. of blood or more; and 70 per cent had a white blood cell count above 10,000 cells per cubic millimeter.

In initial course of treatment was frequently given in small increments at weekly intervals. However, since the effect of a given amount of P_{32} cannot be evaluated short of four to six weeks, the *initial dose* as here used reflects that amount of radiophosphorus given at an interval greater than 30 days following the initial dose. The initial dose ranged from 3.0 millicuries to 12 millicuries (mean of 7.6). The maintenance doses varied from 2.0 millicuries to

Physical Signs

	Study Group	Harman[3]	Lawrence[4]	Tinney[5]	Wintrobe[6]
No. of Patients	28	48	116	163	
Plethora	82%	100%			
Palpable spleen	54%		65%		
Palpable liver	43%				50%
BP over 150/90	39%			40%	
Petechiae	4%				

Figure 2

4.6 millicuries and was given at intervals of from one to 28 months (mean 9.4 months). Twelve of the patients (65 per cent) required phlebotomy subsequent to treatment with radiophosphorus.

When the patients were divided into those who had had a satisfactory clinical response and those who had not, it was found that the average initial dose was 8.8 ± 3.1 millicuries of radiophosphorus in the satisfactory group and 6.3 ± 2.7 millicuries in the unsatisfactory group. This difference was found to be statistically significant when analyzed by use of the "t" test ($t = 2.66$, $p = .02$). The efficacy of the larger dose is also indicated by a somewhat longer duration of remission (9.8 months with over 7 millicuries of radiophosphorus and 2.4 months with less than 7 millicuries) and less need for subsequent phlebotomy (an average of 8.9 millicuries of radiophosphorus for those not requiring plebotomy and an average of 6.8 millicuries for those requiring plebotomy). Neither of the latter 2 differences were significant by themselves ($p = .1$ in both instances) but since both tend in the same direction it lends further support to the efficacy of the larger dose. This initial dose-age agrees fairly well with Stroebel, et al[7] who suggested an average dose of 5.7 millicuries for patients without leukocytosis and 8.3 millicuries for patients with leukocytosis. It is higher than Harman's[3] dose of 4-7 millicuries and Wiseman's[8]maximum of 4.5 millicuries.

The major hazard associated with the use of radiophosphorus is excessive depression

Polycythemia Hemogram

Determination	Critical Values	Per Cent Above
RBC	6,000,000	80
Hmct.	55 per cent	71
Hb.	17 gms.	70
WBC	10,000	70

Figure 3

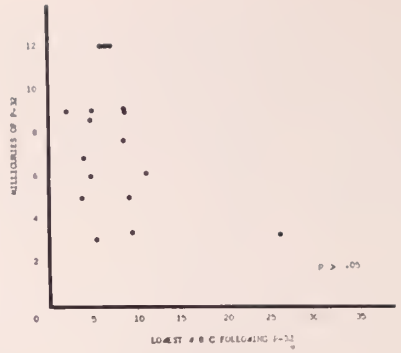


Figure 4

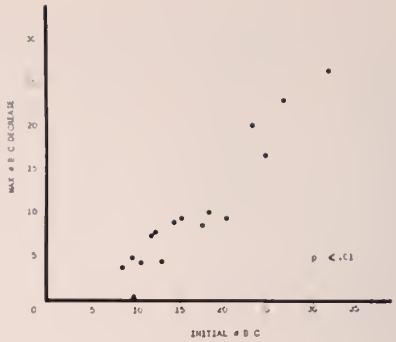


Figure 5

of hematopoietic tissue. One may expect a decrease in the number of white blood cells, platelets and red blood cells in that order. It may be noted, however, in Figure 4 that doses of radiophosphorus as large as 12 millicuries failed to depress the white blood cell count below 2,000 cells. It is also notable that no correlation was found between the dose of radiophosphorus and the depression of the white blood count in this group of patients. Good correlation was found between the *fall* in white blood cell count and the initial white blood cell count (Figure 5). The higher the initial white blood cell count, the greater the decrease ($r = .85$, $p = .01$).

The hazards associated with prolonged use of phlebotomy are iron deficiency anemia, secondary marrow stimulation, continued elevation of platelets and occasional hypoproteinemia. For this reason, phlebotomy *alone* can no longer be considered adequate therapy. Adequate treatment with radiophosphorus precludes the frequent use of this procedure.

In summary, a suggested plan for evaluation and diagnosis would then include: Posterior-anterior and lateral x-ray of chest, timed vital capacity, and arterial oxygen saturation determination to exclude pulmonary disease and secondary polycythemia; red blood cell count, hemoglobin, hemotocrit, white blood cell count, reticulocyte count; examination of peripheral blood for evaluation of platelets and white blood cells and bone marrow examination to exclude other hematological disease which may be present with polycythemia. When the diagnosis is established, the following treatment is suggested (1) phlebotomy to a hematocrit of 55 per cent at the rate of 500 cc. every other day; (2) radiophosphorus with *initial dose* in range of 8-9 millicuries provided the platelets are not decreased, the reticulocyte count is greater than 0.2 per cent[8] and the white blood cell count is over 2,500; (3) treatment with small doses of radiophosphorus when symptoms or blood values above the critical indices (Figure 3) occur, and (4) frequent follow-up visits.

Summary

Twenty-eight patients with polycythemia vera from the University of Oklahoma and Veterans Administration Hospitals are evaluated regarding incidence of major signs and symptoms. Seventeen of these patients are evaluated regarding their response to treatment with radiophosphorus. Those patients receiving an initial dose of 8-9 millicuries of radiophosphorus obtained remissions of longer duration, had a more satisfactory clinical response and required fewer subsequent phlebotomies than did those who received smaller doses. Alarming depression of hematopoietic tissue consequent to the use of P_{32} did not occur in the patients studied.

Acknowledgment: The author wishes to express his gratitude to the radioisotope committee for access to their treatment records and to James F. Hammarsten, M.D., Philip Johnson, M.D., and Robert M. Bird, M.D. for their aid in the preparation of this paper.

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Therapeutic Conference

The MANAGEMENT of ANEMIAS

R. W. PAYNE, M.D., R. M. BIRD. M.D., R. W. KAHN, M.D.

Doctor Payne: The treatment of anemias is generally clear-cut, provided that the physician first determines whether the patient actually is anemic and then sets about to determine its type.

If one considers that the normal hemoglobin of the female may vary from 12-16 grams per 100 cc. of blood and that the accuracy of a single hemoglobin determination is subject to an error of at least 10 per cent, even in the best laboratories, a moment of reflection might prevent unnecessary "blood building."

The regrettable appearance of an increasing number of "complete hematinics" possibly speaks for our lack of interest in the precise diagnosis and correct treatment of anemias. Aside from the fact that these agents are expensive; their premature use may mask valuable diagnostic criteria necessary for a clear appraisal of the nature of the anemia.

Our two panelists today are Doctor Robert Bird and Doctor Robert Kahn, hematologists on our faculty who I am sure need no further introduction.

The use of whole blood transfusions is perhaps the most obvious treatment of anemias and perhaps Doctor Kahn will begin the discussion around this topic

Doctor Kahn: The treatment of any anemia must be primarily based on a knowledge of its cause, because only on this basis can one develop effective treatment. It is quite obvious that anemia of chronic hemorrhage will not be benefited by blood production stimulants. It is more obvious that anemia caused by acute blood loss will not be immediately benefited by hematinics.

Transfusion in the treatment of anemia has, I think, two places: one in the anemia of acute hemorrhage, most particularly in hemorrhage sufficient to produce shock, and to threaten life. Under such circumstances transfusion is the immediate demand for replacement of blood loss and is then a life saving procedure, notwithstanding the dangers of transfusion reactions. Blood under such circumstances is basically the only indication and it should be given in sufficient quantities to alleviate shock and to bring the hemoglobin within functional levels. This functional level may differ with various individuals. In a young man with a good circulatory system this may be 8 or 9 grams of hemoglobin; in an older patient with poor circulatory dynamics it may be not less than 10 or 12 grams. Suffice it to say that the amount of the transfusion should depend upon the need and it should be adequate. The various plasma expanders including plasma itself, dextran, etc., can be used as emergency procedures until blood is made available. But once blood is available it should be used under such circumstances. The second indication is in an individual with chronic blood loss anemia who is faced with a crisis during which there is no time to replace blood by blood building factors. Such an individual might be a patient with a bleeding carcinoma of the colon who is faced with a surgical procedure which will possibly stop his bleeding and, it is hoped, remove the cause of his anemia. Under such circumstances blood should be administered in sufficient quantities to restore the blood to func-

(University Hospitals, April 16, 1956)

THE AUTHORS

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R. M. Bird, M.D., and R. W. Kahn, M.D., are also associated with the school. Doctor Bird is an Associate Professor in the Department of Medicine and in Physiology. Doctor Kahn is an instructor in medicine.

tional levels for this patient to withstand the crisis which he is about to face.

Doctor Payne: Doctor Bird, do you have anything to add on transfusions?

Doctor Bird: Transfusions are often evidence of diagnostic failure, however, a third indication is the existence of chronic aplastic anemia. This individual is unable to manufacture his own blood and the prime consideration is that of obtaining temporary relief of the anoxia resulting from the anemia. In such events transfusions are supportive but not at all corrective.

Doctor Payne: Many iron salts are available for the treatment of hypochromic anemia. Doctor Bird, would you tell us which iron preparation you would advise and why?

Doctor Bird: Any oral preparation is satisfactory, the simpler the better. Ferrous sulfate is widely used. Some people prefer ferrous gluconate thinking it is a little easier to take. Parenteral iron administration is very seldom necessary. Its use is limited to the rare individual with a primary disease of the G.I. tract which makes iron absorption poor or impossible, or in cases such as ulcerative colitis where transit through the G.I. tract is so rapid that you may have to use parenteral iron. There are more expensive preparations such as Mol-Iron which some people seem to find less upsetting to digestion but I have not had experience with them.

Doctor Payne: I think Mol-Iron is largely ferrous sulfate with a small amount of molybdenum added. I don't like to leave it quite at that. I think one consideration in the selection of an iron preparation is the cost to the patient. Do you actually think that ferrous gluconate is better tolerated by the G.I. tract?

Doctor Bird: The whole chapter on iron absorption is still in a state of flux. The following points seem clear and are of clinical concern. In man, inorganic iron in the ferrous form must be supplied for absorption and this takes place primarily in the first portion of the small bowel. Iron is not excreted by the body in anything larger than trace amounts. Within the body iron must be combined with protein because its existence in the free ionized form is highly poisonous. In the plasma, there is a small and limited amount of protein which will combine with iron. There exists in the body normally, large stores of iron located in the spleen and bone marrow primarily. Before an iron deficiency anemia develops, these stores must be largely depleted. Such being the case, the body seems to act as though the intestinal tract absorbed or rejected iron in accordance with the body's needs. Although this is not entirely true, a moment's reflection as to the large quantity of iron in a normal diet will point up the necessity for regulated absorption to prevent iron intoxication, acute or chronic, as in hemachromatosis. Furthermore, studies with radioactively tagged-iron have shown that only a small amount, in the order of micrograms, is absorbed from any individual oral dose given. The amount is greater in the person who has deficient iron stores. Now the basic consideration in treatment is this. In order to completely treat an iron deficiency, one must give sufficient iron over a long enough period of time to rebuild the iron stores. In practice, this amounts to three to six months after the hemoglobin has returned to normal.

When using parenteral iron, the big problem has been getting in enough iron to build up the iron stores. The amount of ionized iron that can be given intravenously at any one time is very limited. If you exceed the iron binding capacity of the plasma, you will be dealing with shock, a coronary or sudden death. The saccharated iron preparations available for intravenous use have not been entirely satisfactory and I understand that they are being modified. There is or will soon be available an English product which can be given intramuscularly without resulting in pain or a slough. This may prove to be the answer.

Doctor Payne: Doctor Kahn, how about giving us more on iron?

Doctor Kahn: I have just two comments. One is that iron is of no value except in an individual who has an iron deficiency which, in modern practice in adults, is not very common. The other thing is a minor trick of therapeutics with iron. Many patients you will find who have been given iron have

had various G.I. disturbances from it, and these G.I. disturbances are quite real. Often one can obviate these untoward reactions by "creeping up" on the dose. The usual dose of ferrous sulfate as you know is two grains three times a day. Actually that supplies more iron than one can absorb.

Individuals with a sensitive intestinal tract, started on three ferrous sulfate tablets a day, may develop G.I. disturbances. By starting with one tablet a day taken after the heaviest meal for two to five days, then increased to two tablets after the two heaviest meals in the same fashion, you may avoid upsetting a G.I. tract which has previously rebelled.

Doctor Payne: Is hydrochloric acid useful as an adjunct to iron therapy and also what are your thoughts on ascrobic acid—which is supposed to increase absorption of iron? Actually how much iron is there in the various preparations? I wonder if the G.I. disturbances are really a matter of how much ionic iron that is made available. There is certainly less iron in ferrous gluconate than in ferrous sulfate and therefore the dose of the total compound would be different.

Doctor Bird: The last thing first, ferrous sulfate contains about 20 per cent by weight of ionizable iron and the gluconate is less than that, I think about 10 per cent. In any event, if you are giving say .4 gm per dose of the sulfate you are giving way and above the daily minimal requirement of even the menstruating female whose maximum daily requirements are 2 to 3 mgms per day. Now as far as hydrochloric acid is concerned, USP hydrochloric acid in the dose recommended just about equals the amount of hydrochloric acid which the normal stomach can elaborate in two minutes. So it blackens you teeth and may help the doctor but it doesn't do a thing towards promoting the absorption of iron. Now the use of vitamin C is a little different. Sometimes I recommend it but I don't know of any control work that has been done using tagged iron to see if it is effective. Theoretically it should increase the ionization of iron. In patients with ulcers who are likely to be taking antiacids which could interfere with the maintenance of iron in the ferrous state, the administration of ascorbic acid might be helpful.

Doctor Payne: Ascorbic acid, like sucrose, maintains iron in a reduced state. I believe that there is some animal work with radioactive iron which indicates that ascorbic acid might increase iron absorption. Hematologists tell us to use iron only in iron deficiency anemias, yet most of them use it along with other therapy in pernicious anemia. Am I incorrect in that?

Doctor Bird: Yes.

Doctor Payne: Doctor Kahn, do you agree with Doctor Bird that you should not use iron routinely in pernicious anemia?

Doctor Kahn: I think most of that is based on the hematologists' feeling of insecurity and he always wonders whether he may have missed his diagnosis.

Doctor Payne: I think the conclusion is that iron is of value in hypochromic microcytic anemia and that the iron that is given should be maintained in the reduced or ferrous state, otherwise it will be ineffective. The choice of iron preparations is largely dependent upon the amount of elemental iron made available and certain preparations may look good just because they don't have much iron in them. Many of the older preparations such as Blauds pills, which are largely Ferrous carbonate, reduced too rapidly and I understand the older hematologists were in the habit of cutting the pills to see if they were brown instead of green—in which case they were no longer effective hematinics.

Doctor Payne: A great deal has been written on the value of the accessory metals such as copper, magnesium, cobalt, molybdenum and manganese in the treatment of anemias. Doctor Kahn do you think that these preparations are of any value in the treatment of microcytic anemia?

Doctor Kahn: The few authorities whom I have heard to comment on them seem apparently to uniformly condemn them as ineffective. I have not seen any untoward effects.

Doctor Bird: Cobalt is not innocuous and will cause goiters, among other problems, and I would underscore Doctor Kahn's re-

marks concerning this agent. Reports as to its effectiveness in aplastic anemia and the refractory anemia of renal failure await substantiation. There may be a reticulocytosis with cobalt administration but this is not routinely followed by an increase in hemoglobin.

Doctor Payne: Yes, cobalt is certainly nothing to be trifled with, as a matter of fact, after long term use of cobalt, patients may develop a rather low serum protein in addition to myxedema; although you do occasionally see a misleading initial response as Doctor Bird said. Manganese is ordinarily considered quite toxic to the liver though I don't know whether this is seen in the doses that are ordinarily given. Over a long haul it, as well as copper, could conceivably cause trouble, depending upon dosage. I think that there is agreement that adjuncts are unnecessary and may be harmful. As a matter of principle it is hard to justify the use of hematinics containing these accessory metals, though there is animal work to indicate that these elements might theoretically be of some value.

Now for the matter of protein and amino acid supplements. Certainly a high protein diet is of value in the prevention or perhaps the treatment of anemia as well as maintenance of the patient in general. Do such things as intervenous albumen, the salt poor human serum albumen, or any specific animo acids seem to show any promise in the treatment of nutritional anemias?

Doctor Bird: Certainly protein and the essential amino acids are necessary for the manufacture of the stroma of red cells as well as the protein component of hemoglobin. However, it seems that the hemopoietic organs have such a high priority for the protein in food that malnutrition reflects itself late in hematopoiesis. I had the occasion to see numerous prisoners of war liberated from various Japanese prison camps. Every one would agree that they had severe and multiple nutritional deficiencies but anemia, when present, was always easily accounted for on the basis of blood loss secondary to intestinal parasites.

Doctor Payne: I think that is the conclusion that one must reach if he uses the literature for what it is, though it would seem reasonable that if there was a low serum protein with anemia this would need to be remedied or built up before the anemia could be fully corrected.

Apparently, however, people who are in nutritional arrears take up more iron than those who are well nourished. This clouds the issue to some extent.

Liver extracts were fine when you had to use them and they still may be very good. I'd like to know what Doctor Kahn thinks about them. What about the so called "crude" liver extract in the treatment of pernicious anemia and its relationship to Vitamin B-12.

Doctor Kahn: When we talk about liver extract in the treatment of anemia we have to define our term. It has been fairly well established that pernicious anemia responds very well to treatment with vitamin B-12. Whether that is the true deficient factor or something which the body, even though it has other deficiencies, can transform into the deficient factor, is not entirely clear. But pernicious anemia is not the whole of macrocytic or megaloblastic anemia. The well known exception is nutritional macrocytic anemia. There is also a group of anemias the classification of which we don't really understand. They have been described in various parts of the world by different investigators who weren't really sure whether they were dealing with deficiency anemias or with other deficiencies. Almost all of these anemias can be treated and benefited with liver extract. A few of them require crude liver extract. For our purposes we can say that for the treatment of pernicious anemia and the treatment of most nutritional megaloblastic anemias B-12 is adequate. For those megaloblastic anemias which may not respond to treatment with B-12, one can expect a response in most cases to the ordinary "mill run" of good liver extract, the refined product. A few of those which are not benefited by either of these preparations may be helped by crude liver extracts or liver by mouth. With all of these the dosage of B-12, and of liver, by mouth, is 30 to 60 times that required by injection; so a megaloblastic anemia should be treated along these lines and by parenteral injection.

Doctor Payne: What about the preparations for oral administration containing both intrinsic factor and B-12, are they of value for the correction of pernicious anemia?

Doctor Kahn: If a patient with P.A. responds with full return to normal hematology following the use of a single preparation—whether it be B-12, a liver preparation or a mixed preparation—then it may be continued, and I see no point in adding other factors. Now that doesn't apply to folic acid.

Doctor Payne: What about the justification of giving these medications parenterally rather than by the less traumatic oral route?

Doctor Bird: I think that it is reasonable to assume that eventually we will be able to have adequate intrinsic factor to be combined with B-12 and taken orally. This in the future and at the present time the dosage and biological potency of such preparations are considerably in doubt. In the patient with P.A. one might have sufficient vitamin B-12 absorbed to remedy the hematological picture but insufficient to prevent the onset or progression of neurological complications. The big hazard in his disease today is the involvement of the posterior and lateral spinal columns. People with P.A. are known to get around with a million red cells but they don't do very well with damaged posterior and lateral columns.

Doctor Payne: The literature is quite conclusive on this point. The oral preparations will frequently correct the hematologic picture admirably yet the neurological aspects of the disease progress without respite. For this reason the use of the presently available oral preparations for the treatment of pernicious anemis is to be deplored.

Do enormous doses of B-12, given orally offer any advantage? By "large" doses I mean doses in the order of 1,000 micrograms, given orally.

Doctor Kahn: We really don't know what the toxic dose of B-12 is. I have said that the requirement of B-12 by mouth is 30 to 60 times that by injection. Whether this is a matter of absorption, transmutation or what, the results following parenteral administration are more reliable. I feel that we ought to give drugs by routes of administration which are reliable.

Doctor Payne: True, certainly B-12 is definitely preferable by injection.

What are the indications for folic acid and citrovorum factor? Should one routinely start a megaloblastic anemia on B-12 and if this is not effective, try folic acid or citrovorum factor? Or, in certain predictable types of anemia such as anemia of pregnancy, does one initiate treatment with folic acid?

Doctor Bird: With the patient who you are confident has classical pernicious anemia I would certainly start with B-12 and can see no reason to give folic acid or citrovorum factor. If it is a young woman who has developed a megaloblastic anemia during pregnancy, then I think you are dealing with the situation about which Doctor Kahn spoke. Here B-12 is not very successful and folic acid or citrovorum factor is thought to be much better. There are a very limited number of cases appearing indistinguishably like P.A. in whom you get no response to B-12 after a reasonable length of time. I think then all of us employ "shot gun" procedures, using each in turn or all at once. There has been some work in the literature on just such cases.

If you are treating tropical sprue, you should start with folic acid and not with B-12 because it is evident that tropical sprue responds better to folic acid. Again one might use citrovorum factor or folic acid interchangeably. Non-tropical sprue in adults is a syndrome, not a clearly defined disease entity. Such cases worry me a great deal for they so often ultimately show themselves to be lymphosarcoma or carcinoma of the small bowel. In megaloblastic anemia of liver disease, treatment is so unsatisfactory that most of us are perfectly willing to try everything in hopes that combinations may work.

Doctor Payne: I understand that certain megaloblastic anemias of pregnancy and infancy are not responsive to either folic acid or B-12, is that correct, Doctor Kahn?

Doctor Kahn: A few of them aren't. Wills' anemia sometimes isn't responsive to the usual preparations. In those I think that crude liver preparations may be worthwhile.

Doctor Payne: I am anxious to hear more

about crude liver. I have heard hematologists belabor crude liver yet I suspect that they occasionally use it, maybe in desperation. I suppose that there is no great harm in using it when one has nothing better to offer.

Is there any choice between citrovorum factor and folic acid for the treatment of anemias?

Doctor Bird: I am not sure, but it is my impression that citrovorum factor is more generally and easily utilized that folic acid, but I am not really sure.

Doctor Kahn: I don't know.

Doctor Payne: I don't know either.

Perhaps we can discuss vitamins for a moment. There is animal work which would indicate that various of the B vitamins are of value in some anemias—particularly pyridoxine. Any comment Doctor Kahn?

Doctor Kahn: I don't believe that these compounds are of any value, as such, in the treatment of anemias. However, in a nutritional problem such as Doctor Bird referred to in the people who came out of the Japanese prison camps these things might be of value. Thus, I think that I would put that in the same category as Doctor Bird put protein deficiency. An individual who is starved is probably generally depleted nutritionally.

Doctor Payne: I believe that in animals given pyridoxine antagonists anemia is not prominent.

The matter of intrinsic factor has not reached a satisfactory conclusion at the present time. Several "pure" intrinsic factors have been reported and a great deal of work is in progress in the isolation of this material.

The role of infections in anemias is intriguing. Doctor Kahn, will you tell us what importance you place on infection in the etiology and perpetuation of anemia?

Doctor Kahn: That is a difficult question to answer. Certainly we know that people who have a chronic disease of any kind develop a usually normochromic or perhaps slightly hypochromic normocytic or slightly microcytic anemia. If infection is removed and the general physical condition improved so does the anemia. That is particularly common in chronic pyelonephritis, although sometimes it becomes a question as to whether the renal damage or the infection is the injurious factor. I can not pass this particular item without referring to the fact that anemia is occasionally produced by antibiotics rather than by the infection for which they are given.

Doctor Payne: That is a marvelous point. Certainly it would seem to me that infections do cause anemia and that if the infection is corrected so is the anemia. For example, in the situation of rheumatoid arthritis and rheumatic fever which evidence some aspects of infection, if one is successful in correcting the arthritis the anemia will correct without any iron. Certain organisms are more prone to cause anemia, particularly streptococus viridens.

The use of dessicated thyroid in the treatment of the anemia of myxedema would appear logical. Is dessicated thyroid of any other value in the treatment of anemias?

Doctor Bird: No.

Doctor Payne: The glucocorticoids, by which I mean cortisone, et al, and ACTH should be considered. Certainly anemia is a constant feature of Addison's disease and is benefited as are other features of Addison's disease by glucocorticoids. It would thus appear that these corticoids might serve some mediating influence in the correction of anemia. Certainly these steroids have been used in the treatment of hemolytic anemia with some success. Doctor Kahn, what is your opinion concerning the value of glucocorticoids and ACTH in the treatment of anemia?

Doctor Kahn: I have to admit that I have tried them in desperation in a couple of hemolytic crises and both patients died. Theoretically in certain types of transfusion reactions, in which part of the mechanism is hemolysis, they may be of help. In some individuals with hypersplenism as well as conditions causing blood destruction they are also of value. Other than that I think their value is questionable.

Doctor Bird: I would use ACTH and cortisone a little more. It depends on the instances you see. In certain cases of acquired hemolytic anemia apparently ACTH and cortisone can produce remissions as complete although not as lasting as will subsequently be obtained by splenectomy. Furthermore, autoimmune antibodies develop in some which makes cross matching and transfusing of blood very difficult. In these instances, cortisone or ACTH may be lifesaving. So, I think that the judicious use of ACTH or cortisone in hemolytic anemia is warranted provided you use the proper precautions.

Doctor Payne: Yes, I think that is an excellent point. We most surely would use these agents as temporary treatment in a self limiting type of hemolytic anemia such as a drug induced hemolytic anemia just to get them over the hump. As Doctor Kahn said they probably don't furnish permanent correction except perhaps in Addison's disease.

The androgens should be mentioned because androgens are used for everything. One point of interest is that androgens do correct the anemia of carcinoma of the breast quite strikingly though the patient's don't appear to live any longer. However, these individuals certainly do appear to develop red blood cells under the influence of androgens.

Doctor Bird: Metastatic carcinoma of the prostate is accompanied by a refractory anemia which is corrected by estrogens—this is the reverse of the coin with breast carcinoma and androgens.

Doctor Payne: Why is that?

Doctor Bird: I don't know. Perhaps, with the temporary shrinkage of the metastatic lesions, we have a condition analogous to what you see when infection is removed from the individual.

Doctor Kahn: I have had the opportunity to see a few people with demonstrable myeloptisic anemia from metastatic carcinoma of the breast in which the marrow was most densely infiltrated. If the hormones will shrink sufficiently the metastatic tissue one might theorize that more room develops for blood forming tissue.

Doctor Payne: Splenectomy is a most remarkable treatment for anemia when it works, though proper cases are relatively rare. Do you ever advise splenectomy for an anemia on patients who don't have large spleens?

Doctor Bird: The whole field of what the spleen does, why it does it, when it will help to take it out and why it helps sometimes and doesn't in others, is a tremendously confused problem. If you have a patient with an anemia associated with depression of other formed elements in the peripheral blood, in whom the spleen is enlarged and the bone marrow appears normally cellular, you may be dealing with that C. A. Doan, M.D., Professor at Ohio State University calls "hypersplenism." The case is better documented if one can demonstrate a shortened life span for the circulating erythrocytes or other laboratory evidences of hemolysis. In any event if the patients do have splenic anemia 80 per cent of them will do well for a time following splenectomy. With congenital spherocytic jaundice the treatment of choice is removal of the spleen with clinical cure to be expected in 90 per cent of the cases. If removal is not complete you may have to go back and operate again. Accessory spleens may be anywhere from the top of the head to the bottom of the feet. One of the last accessory spleens we saw was in the scrotum.

Doctor Payne: What is the mortality of splenectomy?

Doctor Bird: It should be in the neighborhood of 2 per cent or less in properly selected cases. I think that the high incidence of bleeding disorders in situations calling for splenectomy is what runs the mortality up. In elderly people this incidence is much higher, I am sure.

Doctor Payne: The operative mortality depends upon the size of the spleen, too. There is another form of therapy that was touched on by Dr. Kahn and that is "detreatment." This is simply a matter of stopping any drug which might be causing the anemia. In this "heyday" of exuberant treatment this is no mean consideration. Sometimes the wise consultant achieves notable success by simply stopping all medication whereupon the anemia occasionally will respond.

I would like to thank our participants for a very honest and informative discussion.

PRESIDENT'S LETTER



Christmas is a'coming and the geese are getting fat. While this is an old folk saying, it can well be applied to the many problems in the field of malpractice. The problems are getting fat. In view of the fact that malpractice suits are being instigated by members of this Association, perhaps these words of Van Dyke's are appropriate at this time.

Are you willing to forget what you have done for other people, and to remember what other people have done for you; to ignore what the world owes you, and to think what you owe the world; to put your rights in the background, and your duties in the middle distance, and your chances to do a little more than your duty in the foreground; to see that your fellow men are just as real as you are, and try to look behind their faces to their hearts, hungry for joy; to know that probably the only good reason for your existence is not what you are going to get out of life, but what you are going to give to life; to close your book of complaints against the management of the universe and look around you for a place where you can sow a few seeds of happiness—are you willing to do these things for a day? Then you can keep Christmas.

Tom McClure M.D.

President

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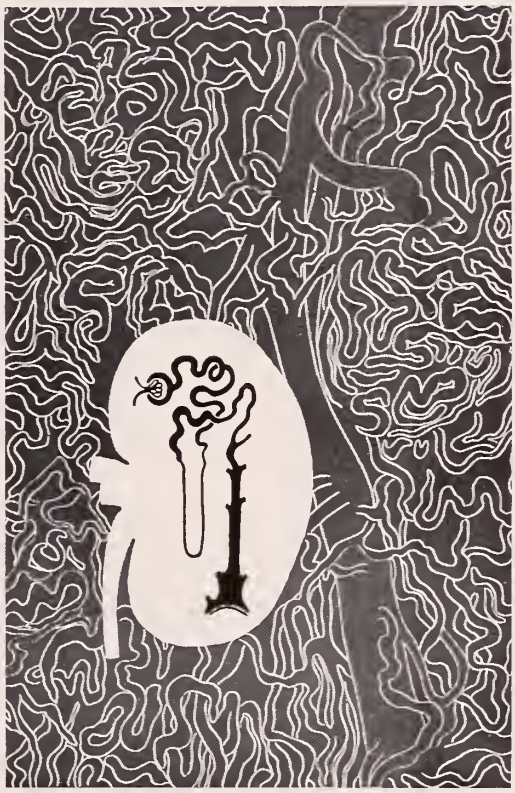
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What They're Saying

So often we see and hear only about the negative side of the medical profession. We seem to illuminate our critics and play down our favorable recognition. Perhaps we have also been guilty of too frequently criticizing ourselves.

A more positive and refreshing outlook was recently called to our attention; an editorial entitled, "The Changing Picture." This article was written by R. P. Matthews, owner and publisher of the *Sapulpa Herald*, who has granted us reprint permission. In addition to Mr. Matthew's favorable attitude toward our profession, we feel that his poignant observations excellently illustrate today's need for a harmonious relationship between collective endeavor and individual proficiency.—Ed.

THE CHANGING PICTURE

The destiny of a city is merely a composite picture of individual ambition.—R.P.M.

Friday afternoon I sat in the stadium at Stillwater and witnessed a fine exhibition of football.

Several long runs were made which brought the spectators to their feet in thrilled appreciation.

A good broken field run looks easy.

And we cheer madly the fellow who makes it.

BUT . . . we forget that there were eleven men in that narrow constricted area (known as the gridiron) who were determined to stop the runner.

The major reason why they didn't and oftimes don't is that the runner had a little bit of cooperation along the way from the fellow who saw things his way and were interested in his ambitions.

That's the way cities, states, and nations are built.

Not haphazardly . . . but by . . . as Kipling put it . . .

"The everlastin' teamwork of every bloomin' soul."

I played football as a lad.

The game has changed tremendously since that day.

The flying wedge had just been barred.

The forward pass was just coming in.

And . . . the Minnesota Shift (that is what we were told it was) was the new rage and the new tactic.

I mention these reminiscences today merely to emphasize the fact that life changes swiftly in both tempo and technique as the years merge quickly into a pattern of decades.

In my "yesterday" the only training table we had was the coach's admonition to us to "not eat cabbage for it hurts your wind."

And . . . when one of us got hurt . . . the most popular panacea seemed to be some liniment and a roll of tape.

This was written Saturday morning (before the OU-Notre Dame game). The success or failure of the "Sooners" in that game doesn't modify or change one bit the fact that the "Big Red" stresses condition.

We watched them in the Orange Bowl game on Jan. 1 of this year and the way they hustled and kept Maryland off balance was a remarkable tribute to "condition."

If eating cabbage hurts your wind, Oklahoma hasn't been within miles of the product which made "Mrs. Wiggins" famous.

As a lad I was told that one of the dangers which lurked in football participation was the liability of contracting "Athletes Heart" and also that bodies accustomed to the rigors of gridiron action would deteriorate rapidly when the player quit, if he lived to middle age, he would be lucky.

The motivation of this dissertation today comes from Doctor Norfleet.

Recently, he mailed me a few articles from the *Journal* of the Oklahoma State Medical association.

In these articles the old fallacies of football were exploded, a few of which are mentioned above.

One article was by Don H. O'Donoghue, M.D.

It is not my intent to go into a long reproduction of his opinions, suffice to say, they were excellent.

Another article dealt with health problems of industry.

In sending the extracts to me Doctor Norfleet wrote, "I have been impressed with the fact that the medical profession is at least taking an interest in the community life and that doctors are really trying to become more and more 'participatory citizens.' I know that you are interested in this too, and you will be interested to note from the attached articles that most of the current issue of our state journal is concerned about the problems of the everyday citizen, the cardiac patient, the football lad and his injuries, etc."

I agree with Doctor Norfleet and in agreeing I am not reproaching the medical profession, neither of us have that in mind.

I do think, however it is heartening to pick up a medical journal (and as a layman) *enjoy reading it.*

Yes, football techniques are changing.

Cities are being built differently.

Life is a new and thrilling experience.

We need to see, recognize and adopt the new ways as well as retaining the old familiar patterns (where they are good).

Like the Chinese we can look back with reverence to the past but along with the reverence we have a growing awareness of the golden age of tomorrow.

Teamwork will hasten the transition.

It is good to see articles, like the ones Doctor Norfleet mailed to me.

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Association Activities

GP's Meet in Ardmore

The Red River Valley Section of the Oklahoma Chapter, American Academy of General Practice, held its third annual meeting on Sunday, November 4, at the Lake Murray Lodge in Ardmore. Approximately 50 attended this one-day meeting.

Principal speakers were: R. Q. Goodwin, M.D., Oklahoma City, immediate past president of the Oklahoma State Medical Association and professor of Medicine at the University of Oklahoma Medical School and Robert J. Morgan, M.D., Oklahoma City, who is an instructor in dermatology at the school.

Doctor Goodwin delivered two papers entitled, "Some Pathological Physiology" and "Case Reports of Pathological Physiology."

Doctor Morgan discussed "Allergy and Dermatitis" and "Treatment of Common Skin Diseases."

Wyeth Laboratories, who sponsored this meeting, completed the program by presenting a film on the use and effects of drugs for mentally disturbed patients.

AMA Surveys Hill-Burton Program

An AMA study of the Hill-Burton Hospital Construction Program is now underway. Conducted by the Council on Medical Service, the survey will cover the first 10 years of the program's operation. It is being undertaken to determine to what extent the original objectives are being fulfilled, what effect recent progress in medical and hospital care may have had on these objectives, and what changes, if any, might be suggested to improve the program. Since recent amendments to the Hiil-Burton program include provisions for diagnostic and treatment centers, this study should prove of particular interest to medical societies and individual physicians.

State medical associations have been asked through a brief questionnaire to report observations to the Council. Individual physicians, also, may have experiences or suggestions to offer. If so, such information should be sent directly to the Council's Committee on Medical and Related Facilities, 535 North Dearborn Street, Chicago 10, Illinois.

Doctor West New President-Elect of Southern Medical Group

At the Golden Anniversary meeting of the Southern Medical Association, held in Washington, D.C., November 12-15, W. K. West, M.D., Oklahoma City was elected to the office of president-elect.

Doctor West, who has long been prominent in the Association, and served as first vice-president during the 1955-56 term. He will be formally installed as president of this organization at their annual meeting in Miami, Florida, next fall.

A practicing Oklahoma City orthopedic surgeon, Doctor West is also a professor of Orthopedic Surgery at the University of Oklahoma School of Medicine and is Chief Consultant in his specialty at the Veterans' Administration Hospital.



W. K. West, M.D.

Noted Physicians Speak At Tulsa County Founders Meet

The Tulsa County Medical Society paid tribute to its Founders with a two day post-graduate study meeting on November 14 and 15. Four distinguished lecturers were present as guest speakers.

Doctor Otto Saphir, Professor of Pathology, University of Illinois Medical School, Chicago.

Doctor Walton R. Akenhead, Chairman of the Department of Medicine, Louisiana State University School of Medicine, New Orleans.

Doctor A. Buford Word, Associate Professor of Obstetrics and Gynecology, University of Alabama School of Medicine, Birmingham.

Doctor Lawrence H. Strug, Professor of Surgery, LSU School of Medicine.

Among the subjects covered were: cardiac emergencies, surgical management of benign lesions of the colon, abnormal uterine bleeding, esophageal hiatus hernia and the spread of human cancer.

Doctor Saphir, a graduate of the University of Vienna, is widely known for his research in cancer, and the method by which it spreads in the body. He has been Director of the laboratories at Chicago's Michael Reese Hospital for the past sixteen years.

The event opened with a dinner meeting at the Tulsa Club at 6:30 p.m. on Wednesday, November 14. Doctor W. Albert Cook, retired Tulsa Ophthalmologist and first president of the medical society in 1907 was honored in special ceremonies which paid tribute to the founders of the society.

The address of the evening was delivered by Doctor Word. Doctor Word's subject was "Congenital Absence of the Vagina."

Special guests included John F. Burton, M.D., Oklahoma City, President-elect of the Oklahoma State Medical Association; Joe M. Parker, M.D., Oklahoma City, Chairman of the Professional Education Committee, Oklahoma Division, American Cancer Society, and N. D. Helland, Executive Director of the Blue Cross-Blue Shield plan of Oklahoma.

The program on Thursday was at the Blue Cross-Blue Shield Building. A tumor seminar at 9:00 a.m. opened the program with Doctor Saphir discussing cases presented by Tulsa physicians.

Doctors Saphir and Akenhead conducted a clinical pathological conference at 1:00 p.m. on Thursday.

The clinic was jointly sponsored by the Tulsa County Medical Society, Tulsa Academy of General Practice, The Oklahoma Division of the American Cancer Society, and the Tulsa County Heart Association.

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Beck-Bradford Clinic Completed in Lindsay



Charles E. Beck, M.D., and Arthur Calvin Bradford, M.D., jointly share the new Beck-Bradford Clinic which was recently completed in Lindsay, Okla.

The 1,926 square feet of floor space includes a large reception room with two private offices adjoining, five examination rooms, laboratory and an emergency and recovery room. The *Journal* wants more photographs and information concerning other new office buildings.

Carter-Love-Marshall Society Meets in Ardmore

Members of the Carter-Love-Marshall Medical Society recently entertained their wives at the society's annual "Ladies Night" dinner which we held on November 13 at the Dornick Hills Country Club in Ardmore.

H. M. McClure, M.D., President of the Oklahoma State Medical Association was the principal speaker of the evening.

Doctor McClure spoke to the group about their part in medical public relations and also discussed activities of the state association. Of particular significance was his explanation of Public Law 569, passed by the 84th Congress, which provides for private medical care to the dependents of military personnel. After Doctor McClure's presentation, a question and answer period followed during which he and Don Blair, Associate Executive Secretary of the OSMA, clarified questions raised about the "Medicare" program.

J. Hobson Veazey, M.D., president of the county society, presided at the dinner. An excellent program of entertainment was provided by Roger J. Reid, M.D., program chairman, who arranged to have two soloists from the University of Oklahoma School of Music appear before the group.

State GP Meeting Announced

The Oklahoma Chapter, American Academy of General Practice, will hold its ninth Annual Meeting at the Biltmore Hotel, Oklahoma City, February 4 and 5, 1957.

Guest speakers for the meeting will be: Claude J. Hunt, M.D., Kansas City, Missouri, who will speak on "Tumors of the Neck" and "Small Bowel Obstruction;" Michael Newton, M.D., Professor of Obstetrics and Gynecology, University of Mississippi Medical Center, Jackson, Mississippi, who will speak on "Support During Labor" and "The Diagnosis and Management of the Adnexal Mass;" Franklin V. Wade, M.D., Flint, Michigan, who will speak on "Pitfalls in Management of Upper Extremity Fractures" and "Pitfalls in Management of Lower Extremity Fractures" and I. Phillips Frohman, M.D., First President of the District of Columbia Chapter, American Academy of General Practice, Washington, D. C., who will speak on "Education and Research for the Physician" and "The General Practitioner Writes."

An added attraction to the program will be a "live clinic" presented by Stewart G. Wolf, M.D., Professor of Medicine, University of Oklahoma School of Medicine.

John S. DeTar, M.D., Milan, Michigan, President of the American Academy of General Practice will be the speaker at a dinner meeting on Monday evening, February 4. Herbert Bagwell and his seven piece group will furnish music and entertainment.

Doctor Bird Honored

Robert M. Bird, M.D., Associate Professor of Medicine at the Oklahoma University School of Medicine was recently honored by being elected to active membership in the American Clinical and Climatological Association.

This society is composed of internists, most of whom live on the East coast.

Other members representing the association from Oklahoma are: William W. Rucks Jr., M.D. and Stewart Wolf, M.D. The late Lewis Moorman, M.D., former editor of the *Journal* was a member of this group.

E. B. Dunlap, M.D. Gets Award



Pictured left is E. B. Dunlap, M.D., Lawton who was awarded a pin and accepted to membership in the "50-Year Club" of the Oklahoma State Medical Association.

H. M. McClure, M.D., President of the Oklahoma State Medical Association made the presentation during the Southwestern Medical Meeting held recently in Lawton.

Fletcher L. Nelson, M.D. Awarded 50-Year Pin

Fletcher L. Nelson, M.D., veteran Tulsa physician, is shown (left below) as he receives a 50-Year Club pin of the Oklahoma State Medical Association from F. L. Flack., M.D., President of the Tulsa County Medical Society. The presentation was made at the November 12th meeting of the Tulsa County Medical Society.

Doctor Nelson graduated from the University of Arkansas School of Medicine in 1906 and entered practice in Oklahoma the same year.



OSMA Names Guest Speakers

Eleven nationally known medical personalities have been set as visiting distinguished guest speakers for the 51st Annual Meeting of the Oklahoma State Medical Association in Tulsa, May 6-8, 1957, it was recently announced.

Doctor Edward L. Moore, Chairman of the Scientific Works Committee, said the following had accepted invitations to appear:

Doctor Joe Vincent Meigs, Professor of Gynecology, Harvard Medical School, Boston, Massachusetts.

Doctor John S. Lundy, Chairman of the Department of Anesthesiology, Mayo Clinic, Rochester, Minnesota.

Doctor Claude S. Beck, Professor of Cardiovascular Surgery, Western Reserve University School of Medicine, Cleveland, Ohio.

Doctor John W. Gofman, Professor of Medicine, University of California School of Medicine, San Francisco, California.

Doctor Michael K. O'Heeron, Chairman of the Department of Urology, Baylor University Medical School, Houston, Texas.

Doctor William Dameshek, Professor of Medicine and Pathology, Tufts University Medical School, Boston, Massachusetts.

Doctor Russell J. Blattner, Chairman of the Department of Pediatrics, Baylor University Medical School, Houston, Texas.

Doctor George C. Griffith, Associate Professor of Medicine, University of Southern California School of Medicine, Los Angeles, California.

Doctor Eric Oldberg, Professor of Neurosurgery, University of Illinois School of Medicine, Chicago, Illinois.

Doctor Paul C. Swenson, Professor of Radiology, Jefferson Medical College, Philadelphia, Pennsylvania.

Doctor I. Phillips Frohman, nationally known specialist in pulmonary diseases, Washington, D.C

A twelfth speaker in general surgery will be announced later.

The program will also feature roundtable luncheons, commercial and scientific exhibits, medical motion pictures, specialty group meetings, business sessions, and several delightful social events.

The meeting will be at The Mayo. Hotel reservations may be secured by writing the Tulsa County Medical Society, B9 Medical Arts Building, Tulsa.

Doctor Walter E. Brown of Tulsa is serving as General Chairman, assisted by Doctors Edward L. Moore, Jack L. Richardson, Donald L. Brawner, Robert E. Funk, E. N. Lubin and Robert Hall Johnson.

Community Honors Doctor Blackmer With Special Day

L. G. Blackmer, M.D., was recently honored when his hometown of Hooker set aside a special day to pay him tribute.

Mayor George T. Burdge declared the following Proclamation: *"WHEREAS, Doctor L. G. Blackmer has served our community faithfully and unselfishly for 42 years, I do now proclaim November 9, 1956, as Doctor L. G. Blackmer Day."*

The program of events began with a parade in honor of the doctor. Floats included in the parade were furnished by the school, various churches, civic organizations and business houses. Nearly every store was closed for the parade. Next was a barbeque sponsored by the Hooker Chamber of Commerce, held at the American Legion Hall.

Following the barbeque, the doctor was again honored during the halftime ceremonies of a football game between Laverne and Hooker. He was presented with a special engraved plaque from the citizens of Hooker commending him for his years of service to the community.

Doctor Blackmer was born November 8, 1881, in Albert Lea, Minnesota. He graduated from the Illinois University College of Physicians and Surgeons in 1904 and interned in Chicago at the Cook County Hospital.

In 1907 he opened an office at Hot Sulphur Springs, Colorado. From Sulphur Doctor Blackmer moved to Steamboat Springs, Colorado and practiced with his twin brother, Frank J., for four years before coming to Oklahoma in 1912 and locating at Guymon.

In 1914 he moved to Hooker and established the First National Bank, serving as president until 1952 when he became President of the Board.

Doctor Blackmer did limited practice when he first arrived in Hooker, but decided to open an office in the rear of the bank building and resume his practice after an influenza epidemic hit in 1917. He continued his practice there until opening his present Clinic.

Doctor Blackmer estimates that he has traveled about five million miles, brought about 3,000 babies into the world and has seen about 300,000 patients.

He helped to organize the first golf course in Hooker by donating land to the community. In addition to being a charter member of the Lions Club and the Sportsman Club, he is also a member of the Presbyterian Church, Chamber of Commerce, County Medical Society and has a life membership pending in the Oklahoma State Medical Association.

OSMA Representatives Meet With Defense Department

Representatives of the Oklahoma State Medical Association, and the Oklahoma Blue Shield Plan met with the representatives of the Department of Defense in Washington, November 7-8, to negotiate a contract for the Medical Care of Dependents of Military Personnel.

Representing the Association were: H. M. McClure, M.D., President, and H. H. Macumber, M.D., Chairman of the Committee on Medical Service, Hospitals and Prepaid Insurance, and Mr. Dick Graham. Representing the Oklahoma Blue Shield Plan were: Mr. N. D. Helland, Executive Director, and Mr. Ralph Bethel, Associate Director.

The negotiations were in two parts: One involved the administration of the program. and the other having to do with the Fee Schedule which would be applicable to the medical and hospital care to be rendered by Oklahoma Physicians to the dependents.

As has previously been reported in the *Journal*, the Dependent's care program became effective on December 7, and information is now being prepared to be sent to the members of the Association regarding the administration of the program, as well as the Fee Schedule.

Doctor McClure, in commenting on the meeting with the Department of Defense, said he was gratified to see that the representatives of the Government were primarily interested in working out a program that would give quality medical care to the dependents, and at the same time, adequately compensate the Physician for his services.

25 Years Ago . .



The *Journal* for December 1931 contained much scientific material on diseases that have since been more or less brought under control.

The Treatment of Pneumonia: E. Eldon Baum, M.D., Tulsa;

Specific Therapy of the Infectious Diseases: J. H. Musser, M.D., New Orleans;

Fusospirochaetal Infection of the Gastrointestinal Tract: Francis M. Duffy, M.A., M.D., Enid;

Complications of Treatment for Syphilis: James Stevenson, M.D., Tulsa;

Why Drain the Peritonial Cavity: Ross Grosshart, M.D., Tulsa;

Cysts Of The Urachus: LeRoy Long, M.D., Oklahoma City;

Intravenous Anesthesia With Sodium Amytal In Surgery: A. L. Blesh, M.D., Oklahoma City;

Extra Uterine Gestation: Jas. L. Shuler, M.D., Durant;

Anemia-Report Of The Case of Miss K.: Wann Langston, M.D., Oklahoma City;

Rare Orbital Tumor In A Child: Arthur H. Davis, M.D. and D. L. Garret, M.D., Tulsa;

The following paper is reprinted from the *Journal* of that date.

SOME SURGICAL BROWSING

F. L. Watson, M.D.—McAlester

The first slide I will present today is that of an advanced case of granuloma inguinale. This was in 1919, when we did not know as much about this condition as we have since learned. Meridith Campbell, New York, had an article in the J. A. M. A., March 5, 1921, in which he claims antimony and potassium tartrate is a specific. Used early I have great confidence in this treatment. This patient had K.I. and salvarsan in enormous quantity; first in Hot Springs, then by me and again in Kansas City, but he grew worse each day until he died. I have seen three other cases, two of whom entirely recovered; the third case left for greener pastures, and I lost track of him.

Slide 2 is a spleen weighing 22 pounds which I removed from a young Negro woman in 1917. This woman was brought in with diagnosis of cystic tumor of ovary, but the diagnosis was differentiated by bimanual vaginal examination. I exhibited this tumor in Chicago and Philadelphia at two large medical meetings. An internationally known surgeon remarked, "That fellow can do surgery; do you note that he says, 'Patient living four months after operation'?" She was still living four years after the operation when I last heard of her. Doctor J. Worth Gray of Oklahoma City assisted with this operation. Diagnosis, syphilitic spleen.

Slide 3 shows a lipoma corpus adiposum buccal before removal. The next two slides show the tumor (two slides) after removal. The origin of this tumor is the infantile sucking pad located and wedged between the buccinator and masseter muscles covered by superficial fascia and zygomatic muscle. This patient was a woman 73 years of age, and lived in comfort until the ripe old age of 82. She first noticed this tumor when 20 years of age and carried it gradually growing for 53 years. It was so large and heavy that she had to have an extra pillow for it at night. She said to me when I did the operation, "If you can just give me one year of freedom from that thing, I will be happy." She got nine years of perfect comfort. This tumor was removed in 1921 and weighed six pounds net at time of removal. Angus L. Cameron, Rochester, Minn., in J.A.M.A., March 19, 1931, collects and reports sixteen cases. This tumor was larger than any reported. Doctor J. F. Park, McAlester, Okla., assisted me in the removal of this tumor.

The next slide is a uterus didelphys removed May 6, 1916, assisted by Doctor T. T. Norris of Krebs, Oklahoma. You will note the single cervical canal which bifurcates and goes out into each respective uteri. Note the single tube and ovary attached to each half. The pre-operative diagnosis in this case was walled off pyosalpinx of long standing. This woman was near the menopause, married a number of years, never pregnant. Each month she suffered so severely from dysmenorrhea that she had to go to bed the entire time and have morphine. The rest of the month she was entirely well and active, no morphine until next menstrual epoch. On account of the palpable tender tumors, it was decided to remove these pus tubes. Imagine our surprise when we uncovered the specimen you see on the screen, which was trimmed up before kodaking. This slide is made from a drawing of the kodak negative. After convalescence she has been entirely well and free from her monthly terror.

The next slide is that of a cervical polyp which grew for years and underwent fibroid degeneration. The patient was a woman 70 years of ago who came into my office and said, "Doctor I have something 'anging out of me," (she was English). She said she " 'ated to but she would just 'ave to show me." When I had her placed on the table, I decided that she did have something hanging out of her myself. The dark spot you see near the top of the tumor is an eroded area caused by the pubic hair, as she carried this tumor turned up over her pubes supported by a perineal pad. It was easily discernable that this tumor was attached to the cervix, and as the uterus was entirely prolapsed, vaginal hysterectomy was easily done and she made a speedy and complete recovery.

The next slide is the tumor after removal and the probe is in the uterine canal. This operation was done December 18, 1919. No assistant; anesthetist, Doctor L. C. Kuyrkendall, who many of

you will recognize as the front end of this tumor, but it was not on the other end of him.

The last slide is a railroad bridge washer. The opening you see will allow a nickel to pass through but will not admit a quarter. The flat surface around the opening is one inch in diameter. The diameter of the reverse side is three inches, weight 13 ounces. On April 19, 1919, 2:00 a.m., Doctor H. N. Bussey called me to come down town as he had something he could not talk over the telephone. When meeting the doctor and his patient, a man about forty years of age, you can imagine my astonishment when I tell you that he had his penis through this hole and the reverse side of the washer as you now see it clear up against his abdomen, and said penis was about twice the size it would be in normal state of erection. Everyone thought the penis would have to be amputated, yet I would not give up. I split a rubber glove in half, slipped about one inch through from front to abdomen with a mosquito forcep. Then I fixed the short end with a standard size hemostat and began to wind in front following the wrapping with the washer until I had it about one-half way removed. It began to look like I was going to burst the gland, so I took a fine point bistoury and made small punctures in the cutaneous surface distal to the washer. Immediately it began to spray serum like a park fountain, and reduced rapidly in size so that one more wrapping removed it easily. I asked the fellow what in the world he was doing getting in that fix. He said, "Oh I was jus' projjikin." If you know what that means, you will understand; I have been unable to find it in the dictonary. Doctor H. N. Bussey, now of this city, helped me with this case. That is all and when the lights come on I will show you the original washer.

The following editorials do credit to Claude Thompson and Pete Nesbit, editor and associate editor respectively.

GRAPE WINE CONCENTRATE LOSES OUT

Despite the splendid legal efforts of Mrs. Mabel Walker Willibrandt, and despite the equivocal position in which she placed herself (for formerly she was of the most rabid proponents of prohibition, as well as one of the most active prosecutors of alleged illicit liquor dealings), the system by which one might purchase a keg of harmless grape juice with directions to leave it loosely corked in the basement, possible skim off the excess occasionally, after which in a short time it would be found to be a very potable drink, the Federal Courts have decided, in substance, that this was a mere evasion of the Federal Anti-Liquor laws; therefore it may not be sold in such form any more. It seems too that one may not purchase compressed grapes to be used in much the same manner.

Senator Royal Copeland of New York, himself a doctor of no mean rating, has long charged that the authorities were "conniving" at an evasion of the prohibition law by helping to finance and sanctioning the production of grape concentrates by prohibiting home wine-making. A survey under authority of Director Woodcock, showed more than a billion gallons of wine of 12 per cent alcoholic content have been made from California grapes, against which practice no action was taken by the Federal authorities; on the contrary it is charged that the Federal Farm Bureau had financed the production of grapes and grape concentrates for home wine-making, for a loan of about $20,000,000.00.

WHY SUCH A HURRY?

After thirty years, so reads the dispatches, many of those who volunteered with Walter Reed in his fight on Yellow Fever, have received "splendid" recognition from Congress. Some of these are described "they consist of a gold medal with the name of the recipient on one side" and the words "Conquest of Yellow Fever" on the back. Congress also awarded some of the volunteers a pension of $125.00 a month. The writer saw, not long ago, the Congressional Medal of Honor bestowed upon a worthy man after a lapse of twenty-five years. Judging from these awards to those who either died or endangered their lives in the fight on Yellow Fever, Congress intends to do something about it. All of these facts have been known to the scientific world almost since their occurrence. Monuments, hospitals and other matters have been long since erected to the memory of Reed and others, but no doubt Congress wishes to be sure about the matter before taking any action.

EDITORIAL NOTES — PERSONAL AND GENERAL

Dr. and Mrs. Felix Adams, Vinita, spent a week in October, visiting in Missouri.

Dr. B. H. Watkins, Hobart, attended the Surgical Clinics in St. Louis, in October.

Dr. and Mrs. A. B. Chase, Oklahoma City, spent part of October, visiting in Arkansas.

Dr. J. R. Hinshaw, Clinton, attended the World Medical Conference in Milwaukee in October.

Dr. T. R. Preston, Weleetka, who was injured in an automobile accident recently is reported much better.

Dr. C. A. Thompson, Muskogee, who underwent a slight operation in Muskogee has made a nice recovery.

Dr. Dan L. Perry, Cushing, has returned from Pennsylvania and New York, where he took special courses in post-graduate work.

Alva is going through the throes of erecting a City Hospital, and of course, are having the usual trouble in the Council as to who shall construct the various parts of the building.

Doctors Shade D. Neely, N. R. Holcombe, F. W. Ewing, Muskogee; T. A. Hartgraves, Marque Nelson, Tulsa; H. C. Weber, Bartlesville, attended the Kansas City Clinical Society in October.

The Tulsa Academy of Ophthalmology and Oto-Laryngology met in the assembly room of the Medical Arts Bldg., November 16, 1931, 8 p.m. Dr. Roy Dunlap was elected president and Dr. Marvin D.

Henley, secretary and treasurer for the coming year. This organization has been active for the past ten years.

The extension Department of the University of Oklahoma, Norman, Oklahoma, began its post-graduate course at Bartlesville, November 16th; at Okmulgee, November 17th; at Tulsa, November 18th. The subject was Traumatic and Orthopedic Surgery with Fracture Clinics, and were in charge of Doctor C. B. Francisco, Kansas City, Missouri. Others connected with the Clinic were Doctors F. D. Dickson, W. B. Carrell and H. Winnett Orr.

Standard Insurance Reporting Form For Oklahoma Doctors

The Insurance Committee of the Oklahoma State Medical Association is now attempting to put a standard insurance reporting form into use, Basil Hayes, M.D., Chairman, recently announced. Insurance companies who do business in Oklahoma have been notified of this program and members of the Association have received sample copies of the form.

Doctor Hayes explained that this action is the outgrowth of a joint study by the American Medical Association and representatives from the insurance industry. The Oklahoma form has been patterned after a form suggested by this study committee. "The advantages of a standard form are obvious," Doctor Hayes said. He pointed out that too much time is being spent by physicians in deciphering and interpreting the great variety of forms presently in use by the multitude of insurance companies in the health field.

Insurance companies have been asked to adopt the form and supply it through their regular channels by December 1, 1956, the date sample copies were mailed to Oklahoma Physicians by the Committee. Until the time the forms are accepted by all insurance companies, it will be necessary for each physician to supply his own. Order blanks have been distributed to the profession which will enable physicians to buy the forms at a very nominal rate of about 75 cents for a pad of 50.

"The complete cooperation of the medical profession will be necessary if this simplification program is to be effective," Doctor Hayes said. He added that if every physician in the state insists upon using the Standard Form, reluctant insurance companies may thereby be impressed with the importance of this project and recognize the value of adopting such a form.

Care of Military Personnel AWOL Procedure Changed

In a number of cases physicians and hospitals have accepted for emergency treatment members of the Army who were in a status of absent without official leave (AWOL), it was recently announced by Fourth Army Headquarters. Upon subsequent submission of vouchers for payment, the physician or hospital has had to be informed that current regulations preclude the payment from public funds for medical treatment rendered military personnel in such a status.

Upon the acceptance by a hospital or physician of a member of the Army, immediate report should be made to the Army commander of the Area in which the civilian medical care is required, the chief of the military district of the area, the nearest Army post commander or the individual's commanding officer, giving the individual's name, serial number, organization, military address, status, nature of illness or injury and statement of the practicability of transfer of the patient to an Army or other governmental hospital. This procedure should be accomplished whether the person is absent with or without official leave in order that his parent organization may be informed of his continued absence by reason of illness or injury. A similar report should be rendered if for any reason an unconscious patient is believed to be a member of the Army. On receipt of an acknowledgement from military authorities authorizing the civilian hospital or doctor to treat the case, the charges for medical care furnished AWOL personnel subsequent to receipt of the authorization may be paid. These statements apply to practically every situation except when unauthorized medical care is furnished for a condition that is not an emergency. Statements of account for payment may be forwarded to the individual's commanding officer, or The Surgeon, Fourth Army, Fort Sam Houston, Texas.

OSMA Committee Submits Proposal To United Mine Workers

The Committee on Medical Care under the United Mine Workers of America Welfare and Retirement Fund met on October 21 to discuss recent changes in the policies of the U.M.W.A. The meeting was held in an effort to resolve certain controversial problems between Oklahoma physicians and the U.M.W.A.

New Policies Exclude GP

Under the original program, all physicians in the mining areas of the state were allowed to provide medical and surgical care to union members and their families. On November 1, 1955, however, policies of the U.M.W.A. were redefined and provided that all major surgery must be done by physicians who were either Board Certified or members of the American College of Surgeons. The OSMA committee met last spring with George M. Brother, M.D., Area Medical Administrator of the U.M.W.A., in an effort to work out a program which would be less discriminatory, but were unable to reach any satisfactory agreement.

Alternate Proposal Drafted

At the October meeting, the committee directed Chairman Malcom E. Phelps, M.D., El Reno, to submit the following proposal to the United Mine Workers:

Dear Doctor Brother:

The Committee on "Medical Care under the U.M.W.A. Welfare and Retirement Fund" of the Oklahoma State Medical Association met on October 21 to discuss misunderstandings related to the medical program of the United Mine Workers. The meeting was conducted in the light of drafting a more suitable procedure for determining physicians' eligibility to participate in this program.

It is the opinion of this committee that the determination of eligibility under the present plan discriminates against the general practitioner; that the surgical criteria is too impersonal and narrow in scope and that the patient's right of free choice of physician is too limited. At the same time, the committee recognizes your problem of insuring competent medical care to your members and the responsibilities inherent to your position. After careful consideration, the committee his directed me to submit to you the following proposal which we sincerely feel will be equitable to all concerned:

1. We respectfully propose that a re-determination of eligibility for ALL physicians be initiated; that each physician (regardless of Board or College memberships) who is interested in participating in this plan, be required to complete a questionnaire specifying the type of work he wishes to be authorized to do and to submit justification by stating appropriate and adequate qualifications and experience; and that these questionnaires be fairly judged upon their individual merits.

2. We further propose that these questionnaires be studied by an impartial area or district committee of physicians and eligibility for participation thereby be determined. The committee should be entrusted to exercise good judgment as doctors of medicine and be allowed reasonable flexibility in approving a physician's participation based upon the relationship between what he wishes to do and his education and experience, regardless of Board or College memberships.

3. We further propose that doctors who are disapproved for participation may have the right of appeal to a higher committee of the State Medical Association. The right of appeal would also be offered to the United Mine Workers in any cases where they disagree with the area or district committee's recommendation. When the U.M.W.A. files an appeal against the participation of a physician, evidence as to his past record will be admissable.

We realize that this proposal is quite general. If you agree with it in principle, however, we shall be pleased to resubmit it to you again in more specific form.

Sincerely,

Malcom E. Phelps, M.D.
Chairman

Doctor Phelps reports that the committee is now awaiting a reply to this proposal, at which time it will "take any necessary action to relieve the physicians of the mining areas of Oklahoma from unjust discrimination." Members of the committee are Doctors Floyd T. Bartheld, McAlester; Clifford M. Bassett, Cushing; Robert W. Lowrey, Poteau; E. C. Mohler, Ponca City; and H. C. Wheeler, McAlester.

PHYSICIAN PLACEMENT

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice.

Internal Medicine

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unknown.

Pathology

Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, George Washington University, 1950, will finish four years pathology residency in January, 1957.

Pediatrics

David Goldstein, 66 Lafayette Ave., Staten Island 1, N. Y., age 38, Long Island College of Medicine, 1949, two years residency in pediatrics, Board certified, available after October 1, 1956.

Surgery

Duane A. Barnett, 1636 N.E. 46th Street, Oklahoma City, age 30, University of Oklahoma, 1952, interned at Wesley Hospital, Oklahoma City, now in residency at Veteran's Administration Hospital, veteran, will be board eligible and available for practice July 1, 1957.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available January 1, 1957.

Boyd M. Saviers, 514 Lacewood Dr., Dallas, Texas, age 33, University of Oklahoma, 1947, finishing third year residency at Methodist Hospital of Dallas, veteran, available September, 1956.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36. University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

Harry Emanuel Fisher, Jr., Box 161, Barnes Hospital, St. Louis 5, Missouri, age 33, University of Oklahoma, 1952, veteran, available July 1, 1956.

Paul Lucian Livingston, 18340 Lake Chabot Road, Castro Valley, California, age 35, New York Medical College, 1946, served residencies at Orange Memorial Hospital, New Jersey and at Veterans' Administration Hospital, Long Beach, California, now Assistant Chief Urologist at V.A. Hospital, Board Qualified, veteran, available upon sixty days notice.

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Norman L. Thompson, Owner and Manager
Mrs. Dade Thompson, Asst. Mgr.

Medical Witness Film Available

The American Medical Association and the American Bar Association have joined forces for the first time to present a series of educational films dealing with the professional relationships of doctors and lawyers, it was recently announced by Doctor George F. Lull, secretary and general manager of the AMA.

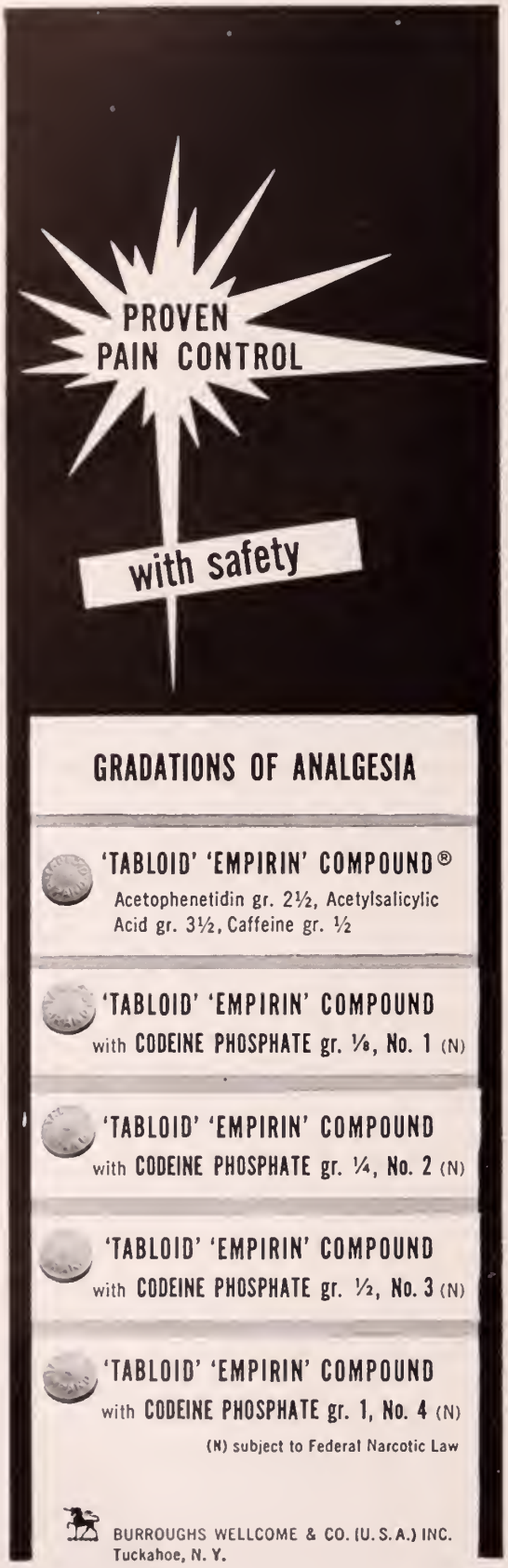
The first film in the series, "The Medical Witness," had its premiere showing at the AMA's clinical meeting in Seattle, Washington, November 27 and is now available for showing before medical societies, bar associations, and other professional groups throughout the country.

"The Medical Witness," a 30-minute black and white 16 mm. film, depicts right and wrong methods of presenting medical testimony by re-enacting the trial of a personal injury case.

It answers such questions as:

1. What is and should be the relationship between the medical witness and the lawyer?
2. What is the most effective way to examine and cross-examine the medical witness?
3. How does the medical witness support his opinion?
4. How does a jury react to the testimony?

Medical societies wishing to arrange for showings of "The Medical Witness" and later films in the series, may write to the Film Library, American Medical Association, 535 N. Dearborn Street, Chicago 10, Illinois.



National Foundation For Eye Care Established

Announcement was recently made of the establishment of the National Medical Foundation for Eye Care, a non-profit scientific and educational institution, incorporated in New Jersey. The Foundation has been organized by ophthalmologists of the country to provide American ophthalmology with an agency to present to the public generally and to fellow physicians pertinent information on the care and treatment of the eyes.

Doctor Ralph O. Rychener of Memphis is president of the Foundation; Doctor Edwin Forbes Tait of Norristown, Pa.. vice-president, and Doctor Charles E. Jaeckle of East Orange, N.J., secretary-treasurer.

In a special statement announcing the Foundation's establishment, Doctor Rychener declared: "American ophthalmologists have long recognized an urgent need for an organization whose principal function will be to interpret the basic professional and scientific standards of good eye care for the American people, both to our fellow physicians and to the people whom we serve."

"The National Medical Foundation for Eye Care will seek to serve the public interest by helping the people to understand the educational qualifications and the professional functions of physicians specializing in ophthalmology, and the functions of related technical and ancillary personnel who assist them. The Foundation will also endeavor to keep our colleagues in the medical profession informed concerning the problems confronting ophthalmology in its efforts to fulfill its mission as a member of the team of recognized medical specialties serving the American people."

Doctor Rychener revealed that the Foundation is now enrolling its charter membership, and he invited all opthalmologists and other physicians interested in eye care to become charter members of the Foundation. Applications are available through Doctor Charles E. Jaeckle, Secretary-treasurer, at 136 Evergreen Place, East Orange, New Jersey.

Defense Department Explains Osteopathic Commissioning

The Defense Department has issued a directive outlining policy in the commissioning of osteopaths in the military service, a law passed by the 84th Congress. An osteopath must meet the following requirements, among others:

To be eligible, an applicant must first be a graduate of a college of osteopathy whose graduates are eligible for licensure to practice medicine or surgery in a majority of the states, and be licensed to practice medicine, surgery or osteopathy in one of the states, territories or the District of Columbia.

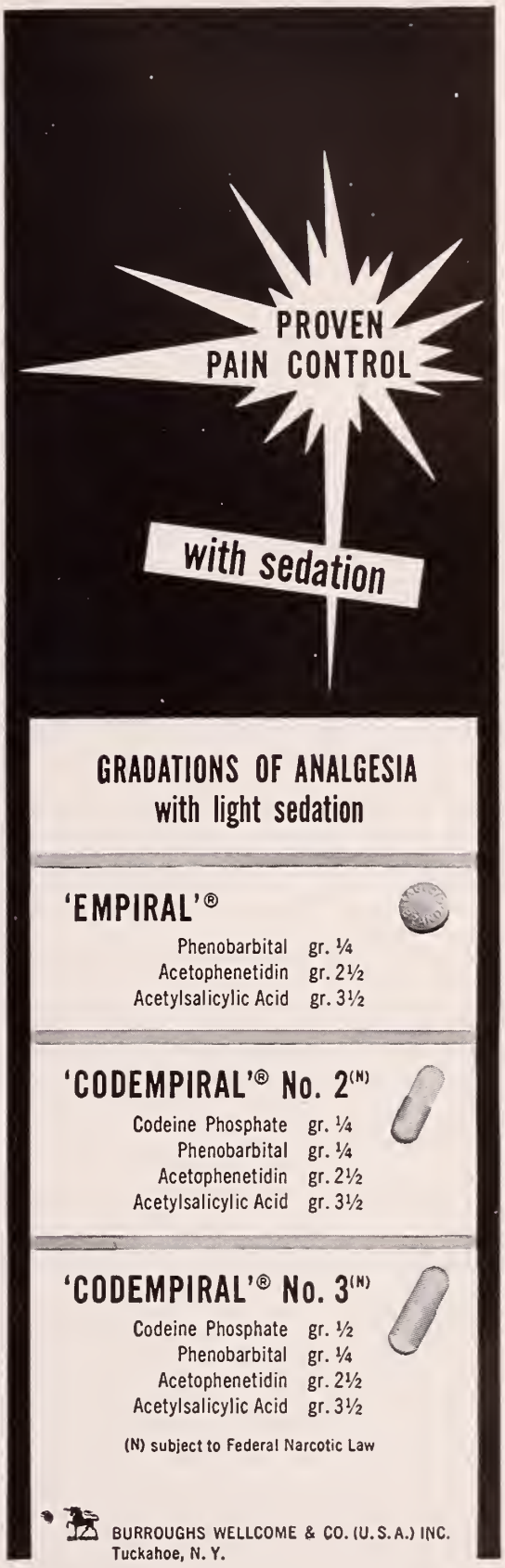
Secondly, he must possess such qualifications as the Secretary concerned may prescribe for his service after considering the recommendations for such appointment by the surgeon general of the Army, Air Force or Navy.

Finally, he must have completed a minimum of three years college work prior to the entrance into a college of osteopathy, plus a four-year course with a degree of doctor of osteopathy in a school approved by the American Osteopathic Association, and a year internship or residency training approved by the AOA.

New Central Oxygen System For Medical School

A new central oxygen supply system is now underway at the University of Oklahoma Hospitals. Liquid oxygen is piped into the hospitals (both the Main and Crippled Children's hospital) from a single storage tank south of the Nurses' Residence. There are 212 wall outlets located in patient areas and the operating rooms where the nurse can plug in a portable flow meter. This system eliminates moving the large oxygen cylinders through the hospitals.

In addition to the central oxygen supply, the operating rooms are now completely piped with the commonly-used anesthetic gases.



Have You Heard?

DOCTORS LEONARD R. DIEHL, J. FLOYD MOORMAN, CHARLES ABRAHAM ROYER, FRANK HARRISON MCGREGOR and HARRELL CHANDLER DODSON, JR., have been added to the Deaconess Hospital Medical staff in Oklahoma City.

A. A. WALKER, M.D., Wewoka physician, left last month on a sight-seeing trip through Central and South American countries.

BERT F. KELTZ, M.D., Oklahoma City was re-appointed Governor for the State of Oklahoma American Diabetes Association, Inc. for 1956-57.

L. J. (LINDY) RAHHAL, M.D., son of Mr. and Mrs. John Rahhal of Weleetka has joined the staff of the Henryetta hospital. He is a graduate of Oklahoma University Medical School and did his internship at the Kansas City General hospital.

JESS HERRMANN, M.D., clinical professor of surgery at the University of Oklahoma medical school is the new president of the American Academy of Neurological Surgery.

GEORGE H. GARRISON, M. D., BEN H. NICHOLSON, M.D. and H. V. L. SAPPER, M.D., Oklahoma City appeared on the program of the Postgraduate Short Course Series which was held November 14 at the University of Oklahoma School of Medicine.

R. L. HUGHES, M.D. and WILLIAM R. MOORE, M.D. of the Moore-Hughes Clinic in Oklahoma City have moved their offices to Blanchard, Oklahoma.

HERBERT KENT, M.D., Associate Professor at the Department of Physical Medicine, Oklahoma University Medical Center appeared on the program during the Southern Medical Association Golden Anniversary Meeting which was held in Washington, D .C.

Book Review

A DICTIONARY OF DIETETICS. Rhoda Ellis, Ph. D., Dept. of Home Economics, Brooklyn College, New York. Cloth. Pp. 152. Philosophical Library, Inc. 15 East 40th Street, New York, 16, N.Y. 1956.

This compilation of dietary terms is the most recent of a series which covers the whole field of human arts and science from "*Encyclopedia of Aberrations*" to "*Yoga Dictionary.*" Forty-eight such encyclopedias and dictionaries have already been published by the Philosophical Library. At least 24 others are in the writing phase.

This book contains the test terms and references related to diet and diet therapy arranged in alphabetical order. The word is defined then, in many instances, broadened by an explanation of nuances frequently involved in the particular word. For example the phrase "Food Habits" is defined and then the particular dietary customs of 14 ethnic groups is described in summary.

The book should prove of value and interest to all who concern themselves with the use of food in health and in disease.

—*John G. Matt, M.D.*

"...in patients with moderately severe and severe cardiac failure, neohydrin is the oral diuretic of choice."*

*Moyer, J. H., and others: J. Chronic Dis. 2:670, 1955.

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Deaths

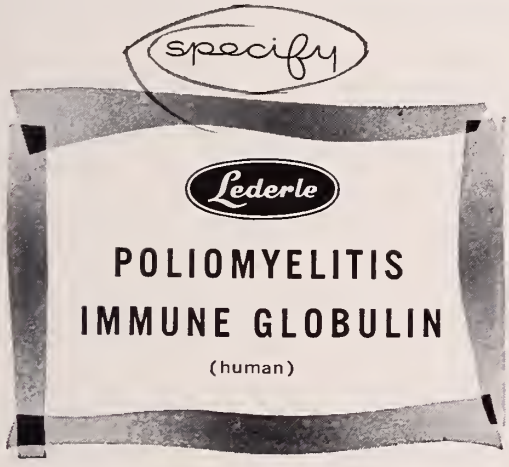
Charles Palmer Bondurant
1899-1956

Charles Palmer Bondurant, 57, chairman of the Oklahoma Public Welfare Commission and professor of dermatology and syphilology at the University of Oklahoma medical school, died of a heart attack October 23 in his home.

He was born in Miami, Missouri in 1899 and graduated from the University of Oklahoma School of Medicine in 1924. He did his internship in Indianapolis and residency in New York with additional graduate work in London, Paris and at the University of Vienna.

Doctor Bondurant was appointed to the staff of the medical school in 1928, a year after he began his Oklahoma City practice, and served as head of the department of dermatology and syphilology from 1946-55.

He was a member of the Oklahoma State Medical Association, American Medical Association, American Academy of Dermatology, American Cancer society, Kappa Alpha fraternity and the Baptist church.



For the modification of measles and the prevention or attenuation of infectious hepatitis and poliomyelitis.

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Benjamin B. Kies
1893-1956

Benjamin B. Kies, M.D., Muskogee, died October 1 from a heart attack at his ranch near Keefeton.

Doctor Kies who was 63, was born May 15, 1893 at Hoyleton, Illinois.

He graduated from Central College in Fayette, Missouri, and received his medical degree from the University of Oklahoma in 1928. He interned at St. Mary's Hospital in Kansas City and St. Agnes Hospital in Baltimore, Maryland.

He first began his medical practice at Hanna and later practiced in Pittsburg and McAlester. Doctor Kies served in both World War I and II.

He was a member of the American Medical Association, Southern Medical Association and past president of the Pittsburg County Medical Society.

After the war, he moved to Muskogee where he was associated with the U. S. Veterans Administration Regional office as Medical Rating Specialist.

A. C. Lucas, M.D.
1871-1956

A. C. Lucas, 85, died November 16 at his home northwest of Castle, Oklahoma.

A native of Cynthiana, Kentucky, Doctor Lucas received his medical education from the University of Iowa, graduating in 1898. He was licensed to practice medicine in Indian Territory prior to statehood.

He arrived in Okfuskee county in 1903 and has practiced there since that time.

Doctor Lucas was a member of the Christian Church, the Masonic lodge, the Okfuskee County Medical Society and the Oklahoma State Medical Association.

In 1946, he was elected to honorary membership in the State Association and in 1952 he became a member of the Fifty Year Club.

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The use of the Index will be greatly facilitated by remembering that articles are often listed under more than one heading. Scientific articles may be found under the name of the author and the various phases of the subject discussed as well as under the listing of Scientific Articles. Editorials and deaths are listed under the special headings as well as alphabetically.

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(S)—Scientific Article
(E)—Editorial
(SA)—Special Article
(GN)—General News
(BR)—Book Reviews
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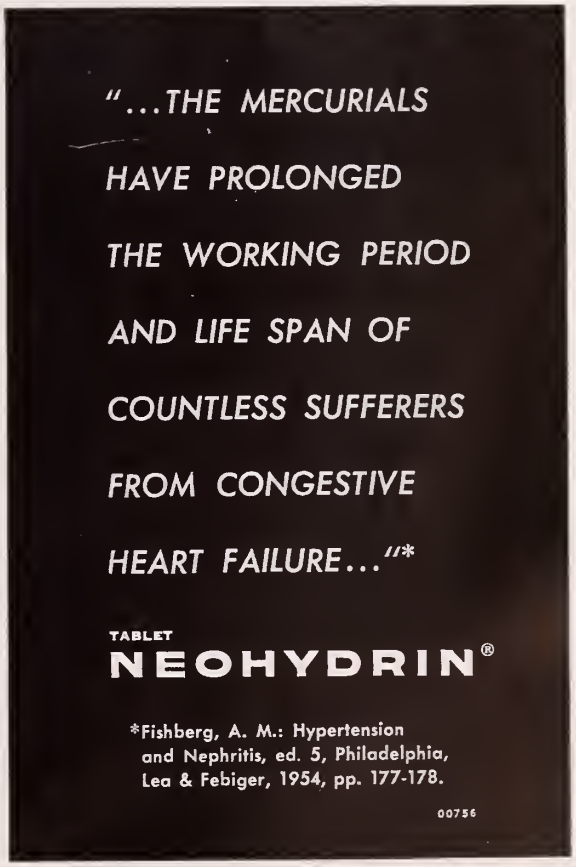
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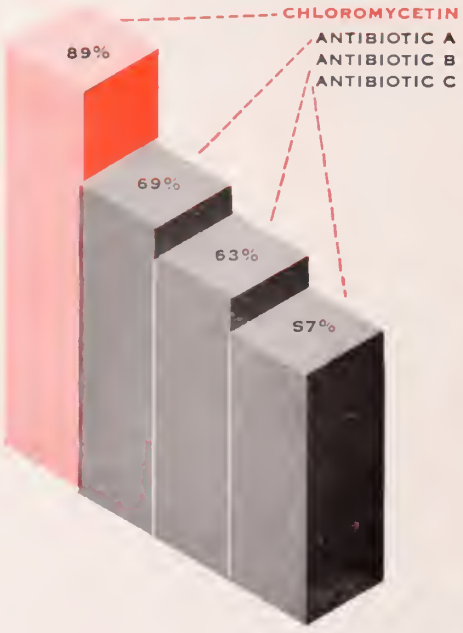
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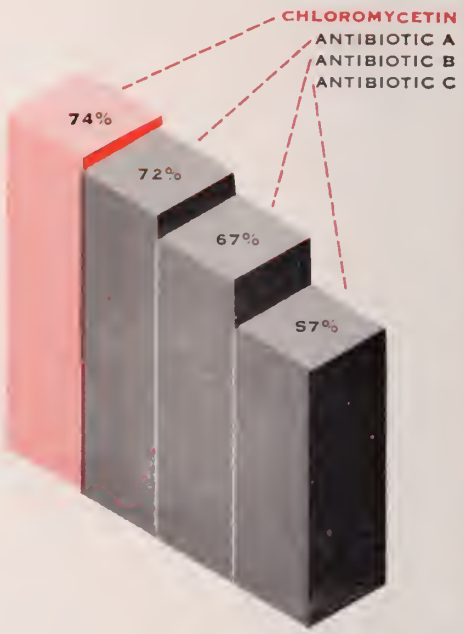


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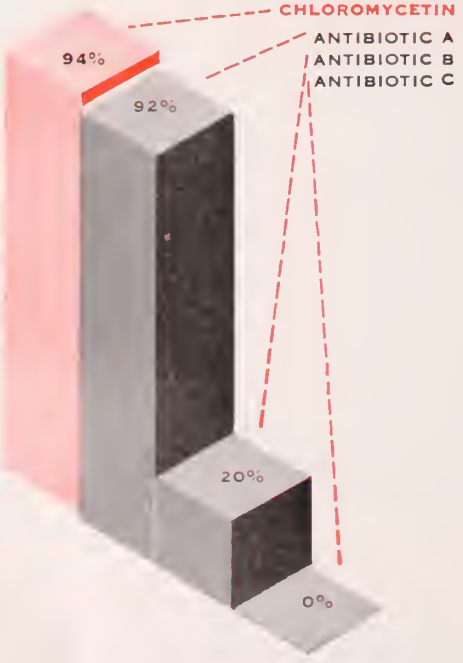
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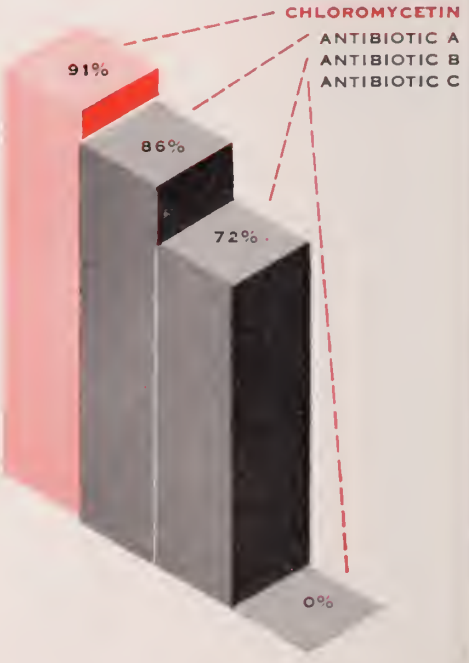
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